



MUWRP  
ANNUAL  
REPORT  
2022

# The Unrelenting **Battle Against Epidemics**

*Est. 2002 - MUWRP @ 20 years*

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# WORD FROM CHAIR, BOARD OF DIRECTORS

Dear our esteemed reader of the MUWRP Annual Report,

I bring you greetings from the MUWRP Board of Directors and greatly thank you for supporting our institution to get to where we are now. It is now over 2 decades since MUWRP was founded, and without doubt we feel that throughout its operations, MUWRP has convincingly asserted itself as an elite biomedical research and health care service organization, that is not only providing new scientific knowledge on emerging and re-emerging infectious diseases, but also largely ensures continuous improvement in the different program areas that are largely impacting the wellbeing of Ugandans.

We are particularly cognizant of the great resilience and resourcefulness that the organization demonstrated

through the COVID-19 pandemic, which largely did not deter MUWRP's professionals from continuously working to serve the needs of the populations, especially in designing innovative approaches to carry on with the research activities and also extend the HIV prevention, care and treatment services in the areas of our jurisdiction.

As we embark on the post Covid-19 era, MUWRP will remain forward-looking and anticipate the challenges and opportunities that face the public health sector in Uganda and the region, especially in the face of the global health threats. Effective collaboration between researchers and policymakers is essential to ensure that policy and program initiatives pursued at the regional and national levels are well supported by the research that we conduct.

Over the years, the Board has played the critical role of ensuring that MUWRP's research, service delivery, capacity building and other activities are consistently responsive to the priorities and needs of the populations that it serves. The members of the Board have generously shared the wealth of their individual and collective knowledge and professional experience gained over many years in their various public and private capacities.

As Chair and on behalf of this distinguished body, I would like to express the Board's renewed firm commitment to help steer MUWRP's work toward even greater heights

**PROF. FRED WABWIRE-MANGEN**

**Chairman, MUWRP Board of Directors**

*The members of the Board have generously shared the wealth of their individual and collective knowledge and professional experience gained over many years in their various public and private capacities.*

*"Over the years, the Board of Directors has played the critical role of ensuring that MUWRP's research, service delivery, capacity building and other activities are consistently responsive to the priorities and needs of the populations that it serves."*

A portrait of Prof. Fred Wabwire-Mangen, a middle-aged Black man with short hair and glasses, wearing a grey suit jacket, a light pink striped shirt, and a patterned tie. He is looking directly at the camera with a neutral expression. The background is a plain, light-colored wall.

**Prof. Fred Wabwire-Mangen**  
Board of Directors

# FOREWORD

Dear Reader,

I welcome you to the MUWRP annual report for the year 2022. As we reflect on the past year, it is incontestable that the year had unprecedented challenges. However, despite these difficulties, we celebrate the fact that MUWRP has continued to make great strides towards its mission of mitigating disease threats through quality health research, disease surveillance and health systems strengthening.

As you will see in the articles featured in this edition, 2022 was a unique year following the Covid-19 pandemic which was associated with restriction that led to new ways of life. Nonetheless, through the unwavering dedication and flexibility of our team and the support of our funders and partners, we worked together to transition back to normal operations and we were able to deliver according to our strategic plan.

One of the highlights for 2022 is MUWRP's contribution to the National response program to the Ebola Sudan outbreak in the districts of Mubende and Kassanda. Over the years, MUWRP has been building capacity in emerging disease research and response through establishing a research/Isolation unit at the Fort Portal Regional

Referral Hospital(FRRH), strengthening the hospital laboratory to achieve SANAS accreditation and providing services beyond traditional hospitals in Africa, training staff in advanced supportive care and Infection Prevention and Control(IPC) measures, conducting clinical research on sepsis and establishing mobile capabilities to conduct clinical research during an outbreak anywhere in the country. Working together with the Ministry of Health, MUWRP through its JMEDICC program was at the forefront of the Ebola outbreak response by participating in a number of national response committees, managing health care workers who were infected with Ebola at the FRRH unit and establishing capability to do safety laboratory tests at Mubende and Entebbe Ebola treatment units.

Other MUWRP programs had several highlights that signified commendable performance. We completed enrolments into the Schistosomiasis vaccine and the Covid-19 vaccine research protocols. We received funding through the CASCADE Network that will enhance cervical cancer screening and management among Women Living with HIV and started activities of the HOPE Collaboratory working on HIV cure research. We scaled up activities under the

PEPFAR program and by the end of 2022 we were providing HIV Prevention, care and treatment services to 60,670 clients in 88 supported health facilities in Buvuma, Buikwe, Mukono and Kayunga. The EIDP program continued to support the MoH with epidemic intelligence information on; human respiratory pathogens surveillance including SARS-CoV-2, causes of acute fevers in Uganda and Somalia, trends in antimicrobial resistance, and causes of acute enteritis among military personnel. In the year 2022, EIDP specifically provided the MoH with over 50 reports on influenza and other human respiratory pathogens for inclusion in the MoH weekly epidemiological reports.

As we look into the future, I am confident that we will continue to grow our research and program portfolio to respond to urgent public health needs of our populations. We look forward to building upon our 2022 milestones, to nurturing existing partnerships, and forging new networks and partners to have maximum impact on our work.

Thank you for taking the time to read our annual report, and for your ongoing support to our organization. We could not have been here without you!

**HANNAH KIBUUKA, MD.**  
MUWRP Executive Director

*"As we look into the future, I am confident that we will continue to grow our research and program portfolio to respond to urgent public health needs of our populations."*

**Dr. Hannah Kibuuka**  
Executive Director

# Glossary of terms **and** acronyms

<b>AHPC</b>	Allied Health Professionals Council of Uganda
<b>AIDS</b>	Acquired Immunodeficiency Syndrome
<b>AP 10-701</b>	Synthetic Toll-like Receptor-4
<b>COVID-19</b>	Corona Virus Disease of 2019
<b>EDC</b>	Electronic Data Capture
<b>EIDB</b>	Emerging Infectious Diseases Branch
<b>ELISA</b>	Enzyme-linked immunoassay
<b>EQAPOL</b>	External Quality Assurance Program Oversight Laboratory
<b>EVD</b>	Ebola Virus Disease
<b>HIV</b>	Human Immunodeficiency Virus
<b>HJF</b>	Henry M. Jackson Foundation for the Advancement of Military Medicine
<b>JCRC</b>	Joint Clinical Research Center
<b>JMEDICC</b>	Joint Mobile Emerging Disease Intervention Clinical Capability
<b>KI</b>	Karolinska Institute
<b>MEURI</b>	Monitored Emergency Use of Unregistered and Investigational Interventions
<b>MHRP</b>	U.S. Military HIV Research Program
<b>MOCHI</b>	Multinational Observational Cohort of HIV and other Infections
<b>MUWRP</b>	Makerere University Walter Reed Project
<b>NDA</b>	National Drug Authority
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief
<b>SARS-CoV-2</b>	Severe Acute Respiratory Syndrome Coronavirus2
<b>SM-TSP-2</b>	Randomized Schistosomiasis Vaccine
<b>TSP-18-03</b>	Schistosomiasis Vaccine
<b>UMN</b>	University of Minnesota
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>U.S</b>	United States (of America)
<b>UVRI</b>	Uganda Virus Research Institute



**Jowali, a biomedical scientist loading prepared samples on the GeneXpert 4 module machine for testing HIV-RNA viral load**

For 20 years, MUWRP has continued to provide leadership and provide cutting-edge research in HIV in Uganda. At the heart of this is the clinical research program, and the clinical and research lab functions. In its 20 years of existence, MUWRP has grown to include new infections and emerging and re-emerging disease threats in its portfolio of research and trial programs. Over the years MUWRP has helped streamline and strengthen health management in the country while also helping to strengthen capacity and capabilities at both the human resource and infrastructural levels. The project has grown to become a recognized and trusted partner in medical research collaborations around the globe.

## MUWRP's **JOURNEY**

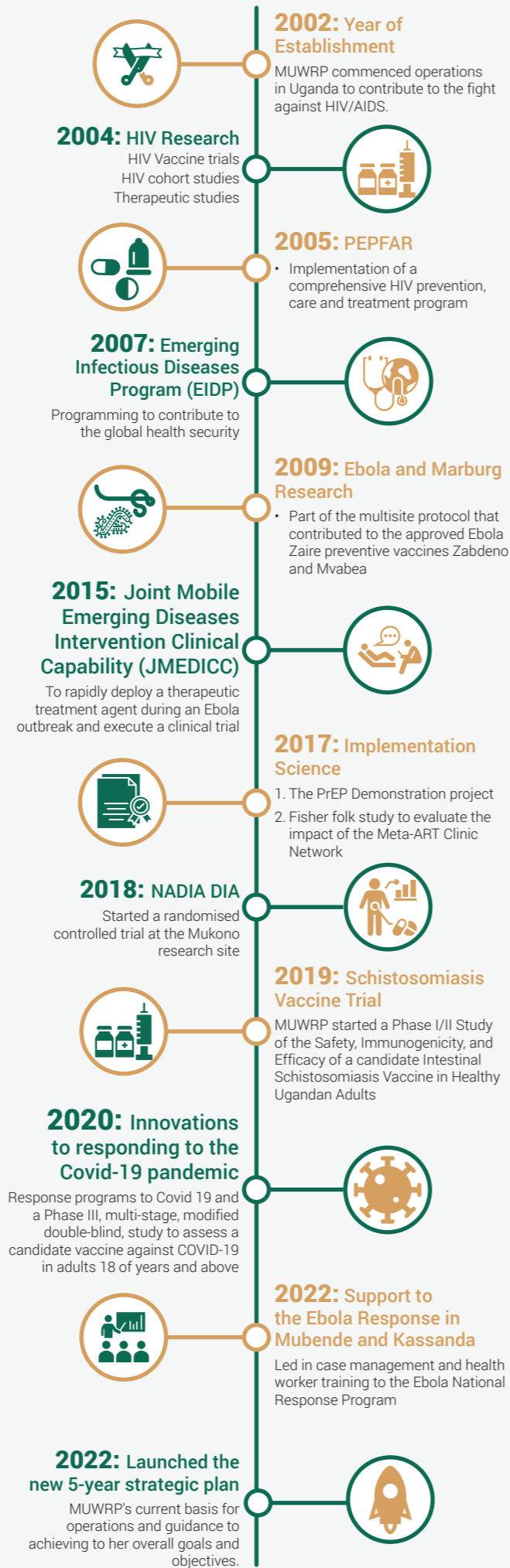
The Makerere University Walter Reed Project (MUWRP) was established in 2002 as a partnership between Makerere University and the Henry. M. Jackson Foundation for the Advancement of Military Medicine, to study the molecular and epidemiological evolution of HIV. This was in preparation for clinical testing of candidate HIV vaccines and to build local capacity to conduct early and late phases of HIV vaccine trials. Since its establishment, MUWRP has conducted several clinical trials on HIV

vaccines, Ebola, Marburg, Schistosomiasis, and COVID-19. Since 2005, MUWRP has managed a comprehensive program for HIV prevention, counseling, testing, care, and treatment, serving over sixty thousand (>60,000) persons living with HIV. MUWRP further expanded her scope to include the Emerging Infectious Disease Program (EIDP) and the Joint Mobile Emerging Diseases Intervention Clinical Capability (JMEDICC) program to conduct surveillance and research in emerging and re-emerging infectious diseases.

"The focus of MUWRP is the development of research infrastructure, the definition of cohorts, the acquisition and clinical evaluation of appropriate products. Since its inception in 2002, MUWRP has successfully enrolled and retained participants for five Phase I and Phase II HIV vaccine trials. Participants have also been successfully enrolled and retained for five Phase I and Phase II Ebola vaccine trials as well as two Phases III/IV HIV therapeutic clinical trials. MUWRP has also conducted one Schistosomiasis vaccine trial – the first of its kind in Africa." *P. Naluyima 2022*

Since 2008, the focus of MUWRP has been on influenza and influenza-like illnesses in both humans and animals. Other areas of focus are antimicrobial resistance and acute febrile illness which are being conducted at several sentinel sites. The reports are shared with the Ministry of Health and relevant key stakeholders. The HIV Prevention, Care, and Treatment Program began in 2005 in one district and now covers four districts. The main focus of this program is to strengthen health systems to achieve UNAIDS 95-95-95 goal.

In the last 20 years, MUWRP has developed facilities and infrastructure that have enabled several research clinics and research sites around Uganda to carry out work. MUWRP has a College of American Pathologists accredited clinical and research laboratory, 2 BSL-2 human and non-human EIDP laboratories, and a high containment 2 BSL filovirus laboratory. Other milestones include support offered to several public health clinical laboratories. MUWRP also runs an office that supports resource mobilization efforts for the sustainability of organizational funding.



## MUWRP - Early years in pictures

In 2022 MUWRP marked 20 years since her birth. The experiences and achievements throughout the 20 years are worth telling. The success that we celebrate now has been a result of tireless efforts by dedicated staff, some of whom still work with the institution whereas others have moved on. On this page we share with you some of the pictures painting our 20 years in memory.



Prof. Wabwire Mangen (Chair, Board of Directors) addressing the gathering during the 2005 HIV Vaccine Awareness Day



MUWRP participated in march during the HIV Vaccine Awareness Day – 2006



Dr. Fred Magala hands over mattresses at Galiraya Health Center as part of the commemorations of HIV Vaccine Awareness Day – 2008



Ntenjeru Field Administrative office – 2008



Former Minister of Health – Hon. Stephen Mallinga (RIP) opens the EIDP Influenza Lab in Entebbe – 2009



Dr. Hannah Kibuuka (left) and Monica Millard (right) with Community Advisory Board members (Mariam and Jackson) – 2012



MUWRP's 10-year Anniversary celebrations at Mulago

# Board of Directors



**Dr. Merlin Robb**

MD

Founder Member and Representative of HJF on MUWRP Board. Member of Technical and Resource Mobilization Committees. Advises on Strategic planning, Organization of full vaccine development programs, Infectious disease research, Pediatric infectious disease expertise



**Prof. Fred Wabwire-Mangen**

Ph.D(Infectious Diseases Epidemiology), MPH, DTM&H, MBChB

Board Chair and a member of the Executive and Technical Committees of the Board. Provides executive leadership, Strategic leadership, governance & ethics, Operational experience, Sustainability best practice, Technical insights, Risk management, Human capital best practices



**Prof. Nelson Sewankambo**

M. MED, MSc, MBChB, FRCP & LLD (HC)

Founder Member, Chair of the Technical Committee and a member of Audit and Risk Committee. Provides Scientific advisory, Epidemiological research, HIV/AIDS research, Indigenous research capability



**Corey Hastings**

MBA (Finance & Marketing), CPA, BA

Henry Jackson Foundation representative on MUWRP Board, Chair of Audit & Risk Committee and a member of Resource Mobilization committee. Technical input in Financial reporting, Financial planning, International financial best practices experience, Strategic planning



**Milly Katana**

MPH, MA (Management), MBA, IPGDM, PGDM

Board member, member of Finance and Resource Mobilization Committees. Provides Community capacity development, Organizational development, Health program design and implementation and financial management experience.



**Prof. David M. Serwadda**

MPH, MSc (Internal Medicine), MSc.(Metabolic Medicine), MBChB

Founder Member, member of Technical, Audit & Risk Committees. Provides technical insights for HIV research & prevention, Infectious disease epidemiology



**Leigh Anne Eller**

Ph.D (Medical Research - International Health), MSc. Biotechnology, BSc. Biology

Ex-officio member of the Board, member of Technical Committee. Provides Laboratory oversight, Technical support in Clinical Laboratory Practices & Compliance, Technology transfer/Capacity building, International experience



**Birungyi Cephass Kagyenda**

PGD (Legal Practice), Dip (Income Tax Administration), LL.B Hons.

Board member, Chair of Finance committee and member of Executive committee. Legal & Financial Management Expert providing Legal and regulatory compliance, Financial acumen, Tax expertise and executive leadership experience.



**Dr. Hannah Kibuuka**

MPH, MBChB

Board Member, Board Secretary, Executive Director of MUWRP, Member of Technical and Finance Committees. Provides Strategic leadership, Technical insights, Clinical trials expertise, Human capital best practice

# Executive Leadership



**Prof. Fred Wabwire-Mangen**  
Chair, Executive Management Committee



**Dr. Vamsi Vasireddy**  
Country Director, Walter Reed Army Institute  
of Research (WRAIR) Medical Research  
Directorate-Africa (MRDA) in Uganda



**Dr. Hannah Kibuuka**  
Executive Director



**Dr. Betty Mwesigwa**  
Deputy Executive Director



**Arthur Natwijuka**  
Director of Administration



**Dr. Prossy Naluyima**  
Laboratory Director



**Dr. Fred Magala**  
PEPFAR Program Director



**Prof. Nelson Sewankambo**  
Senior Researcher



**Prof. David M. Serwadda**  
Senior Researcher

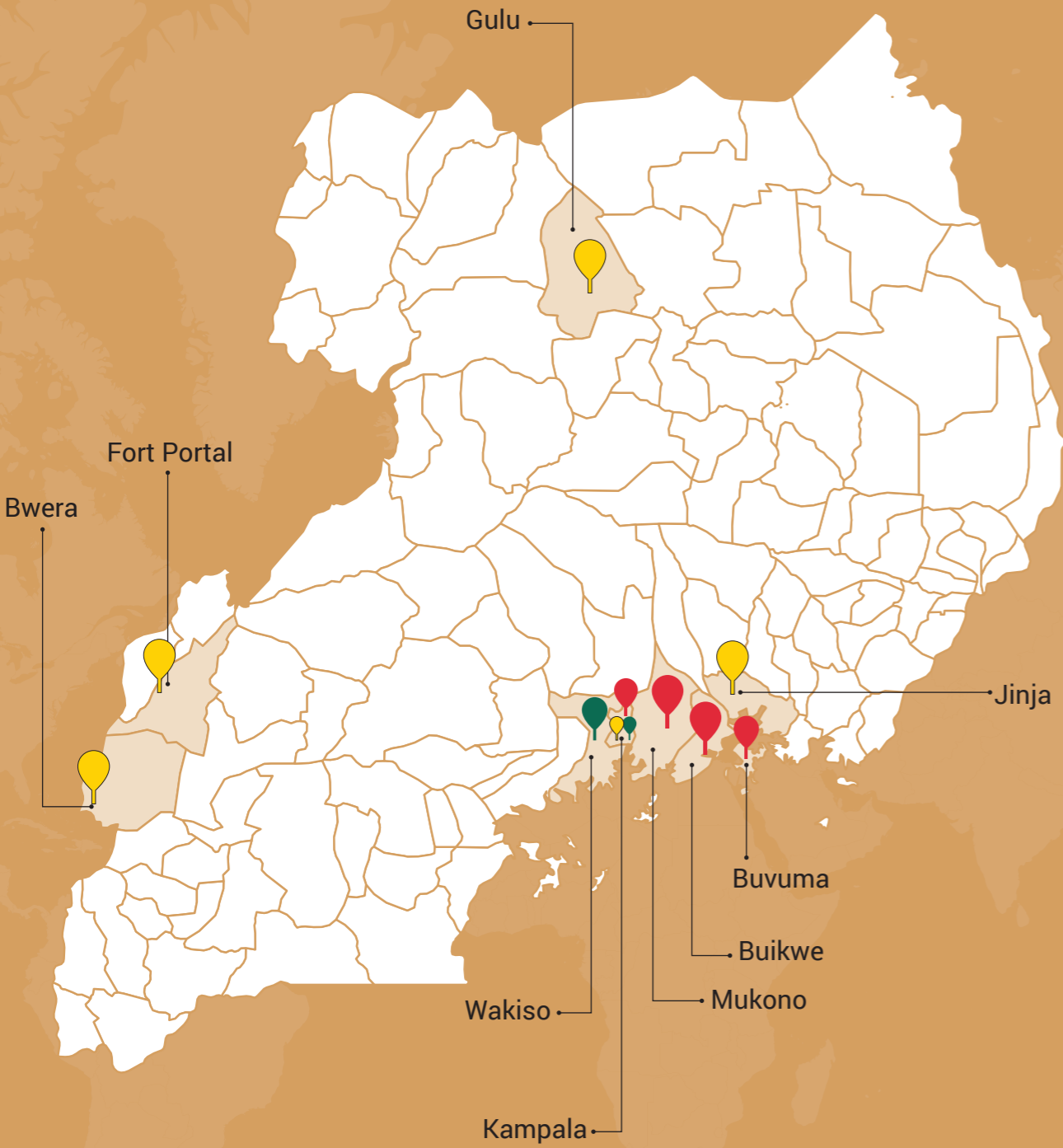
# Departmental Leadership

- 1 **Jude Thaddeus Ssensamba,**  
EIDP Program Manager
- 2 **Dr. Prossy Naluyima,**  
Laboratory Director
- 3 **Ezra Mwesigye,**  
Senior Data Manager

- 4 **Dr. Grace Mirembe,**  
Research Manager
- 5 **Dr. Stephen Okello Erecu,**  
JMEDICC Program Manager
- 6 **Arthur Natwijuka,**  
Director of Administration
- 7 **Dr. Fred Magala,**  
PEPFAR Program Director



# Our Footprint



-  HIV/TB Prevention Care & Treatment (Under PEPFAR )
-  Emerging Infectious Diseases, Research & Surveillance
-  Research in HIV, Ebola, Marburg, Schistosomiasis, Covid 19, Cervical cancer

# MUWRP

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## 2022 KEY HIGHLIGHTS



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Date of service 29/04/2023  
Next service 10/11/2024  
Email: biomedicalengsolu@gs.com

# Clinical & Research Laboratory

## THE MUWRP RESEARCH LABORATORY

MUWRP Clinical and Research Laboratory received the prestigious College of American Pathologists (CAP) accreditation in 2005, and since then, the lab has been at the center of cutting edge testing and sample processing of various medical research studies conducted in Uganda over the years.

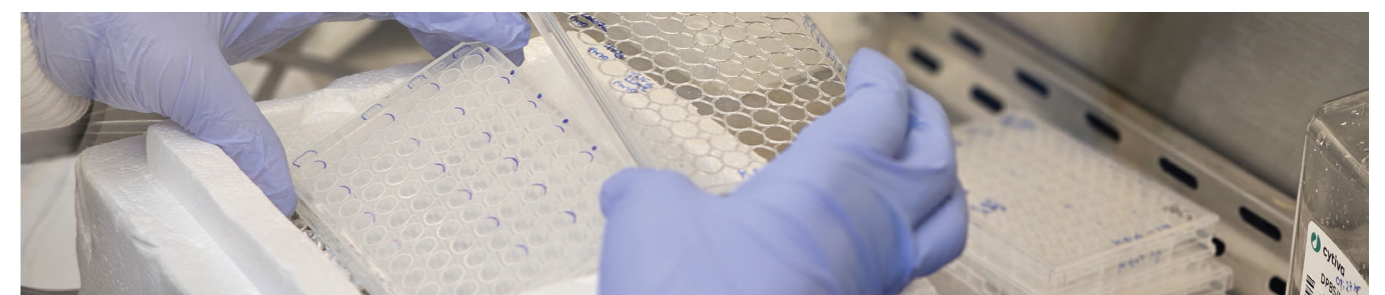
In 2022, the laboratory continued its mission to support research through testing and sample processing and storage for various studies. While doing so, it was also growing favorably under the MUWRP mission, having fully recovered from the constraints brought on by the covid-19 pandemic. The following are among the key highlights that have been achieved in 2022:

### CAP ACCREDITATION

In financial year 2022, the Laboratory again received the College of American Pathologists (CAP) re-accreditation. This will carry forward until June 2025 when the next round of re-accreditation shall be due. The accreditation is vital for the lab to continue to perform high quality work and whose outcomes are internationally recognized.

The re-accreditation implies that there were no concerns with the laboratory's ability to maintain continuous compliance with international standards despite and amidst global challenges such as the COVID-19 pandemic.

*The re-accreditation implies that there were no concerns with the laboratory's ability to maintain continuous compliance with international standards despite and amidst global challenges such as the COVID-19 pandemic.*





## TESTING TRANSITION IN THE LAB

The laboratory transitioned from the Food and Drug Administration (FDA) approved Hepatitis B and C enzyme-linked immunosorbent assay (ELISA) to Conformité Européenne (CE) marked versions that are easier and cheaper to source. It has also transitioned from the Coulter Act 5diff CP to the DxH 520 Hematology Analyzer after

a rigorous assay and equipment verification process. In addition, the laboratory broadened its diagnostic capability when it received a Genexpert 16 that is utilized for SARS-CoV-2, Gonorrhea, Chlamydia, and Mycobacterium Tuberculosis testing.

## MOCHI, RV583

The multinational observational cohort of HIV and other infections (MOCHI, RV583), seeking to identify prevalent and incident cases of HIV and sexually transmitted infections by regular testing of persons at high risk for infection begun in October 2022. The biological and epidemiological data generated from this cohort will be utilized to advance HIV vaccine research and development, in addition to informing HIV prevention and treatment modalities.

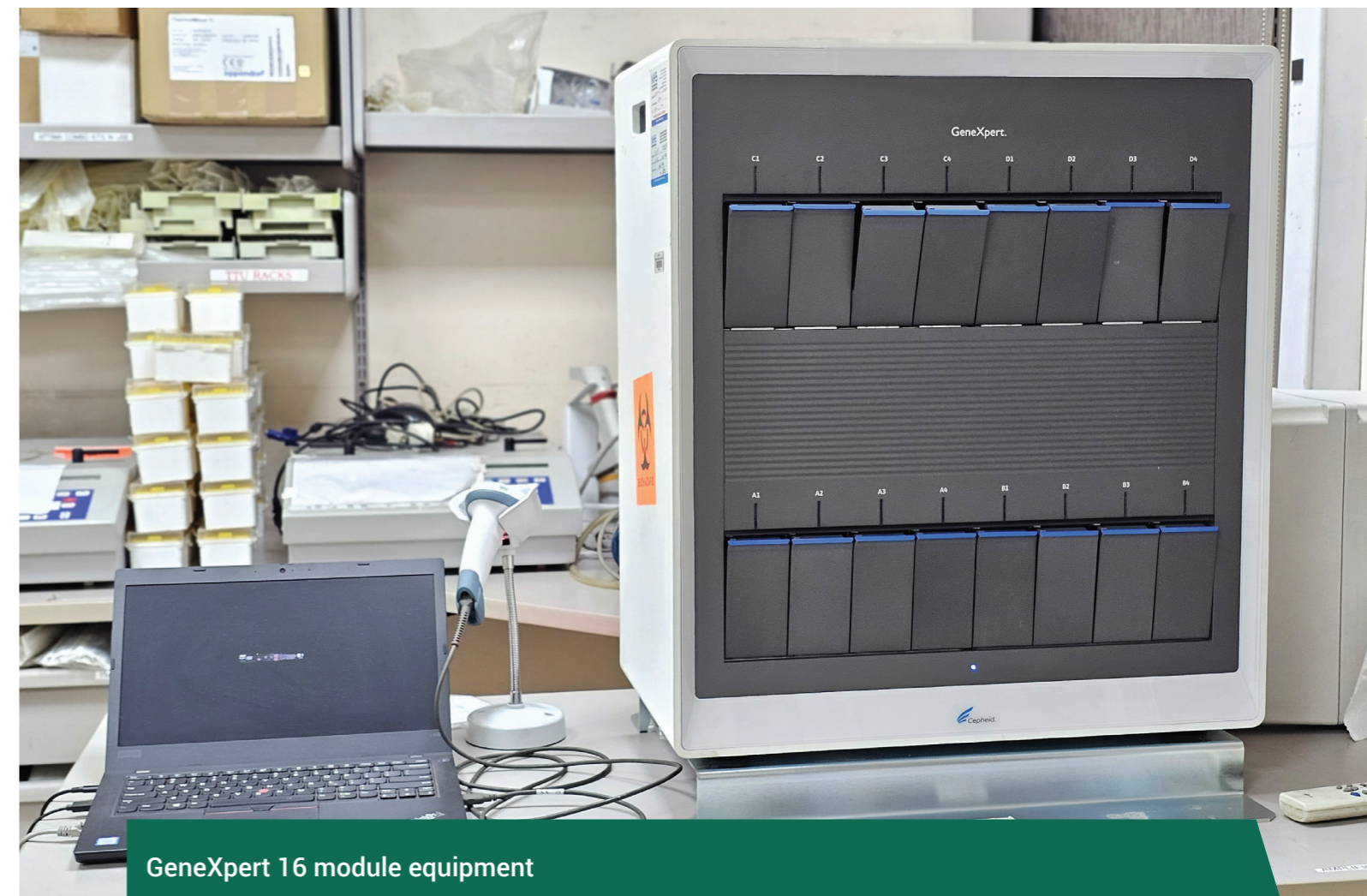
## TSP-18-03

The phase I portion of the TSP-18-03, a phase I/II study of the safety, reactogenicity and immunogenicity of SM-TSP-2/Alhydrogel® with or without AP 10-701 for intestinal Schistosomiasis in healthy Ugandan adults was successfully completed, while the phase II portion completed enrollment. This is the first helminth study whose samples have been analysed in the MUWRP clinical and research laboratory. It has resulted in building both staff and infrastructural capacity for parasite identification and quantitation. The data generated will inform the potential utility of this product for the control of

intestinal Schistosomiasis, a parasitic disease of significant burden to Ugandans (25.6% prevalence<sup>1</sup>).

## JC3318 STUDY

Through a collaboration with the Joint Clinical Research Center (JCRC) and the University of Minnesota (UMN), USA, the MUWRP research laboratory received and processed lymph node biopsies, leukapheresis packs, stool and urine from participants of the JC3318 study. This study aims to determine the effect of inflammation and damage to lymphnode structures on durable protective immunity following yellow fever vaccination. The data generated will provide information on the role of endemic infections on the architecture of secondary lymphoid tissue, and the impact on the immune responses to vaccination. This is relevant in order to provide guidance in the formulation and timing of vaccination in resource limited settings such as Uganda. This is the first time MUWRP has worked with Prof. Timothy Schacker's group from the University of Minnesota. MUWRP will continue to identify areas of mutual interest for further collaboration.



GeneXpert 16 module equipment

## STUDY ON CORONAVIRUS IMMUNITY

On an even brighter note, MUWRP Executive Director, Dr. Hannah Kibuuka and the MUWRP Laboratory Director, Dr. Prossy Naluyima collaborated with Prof. Johan Sandberg of the Karolinska Institute (KI) in Sweden to successfully apply for 4-year funding from the Swedish Research Council to investigate

Coronavirus immunity before and during the COVID-19 pandemic in the AFRICOS cohort. This work expects to build on previous collaborations between MUWRP, KI and the US Military HIV Research Program. It will contribute to a better understanding of the pathogenesis of COVID-19 in Ugandans.

<sup>1</sup> <https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0007617>



Sample storage at the MUWRP – Mulago Clinical and Research Laboratory



Priscilla, a Biomedical Scientist prepares the COBAS C111 Chemistry machine

# President's Emergency Plan for AIDS Relief (PEPFAR)

# PEPFAR: THE CRITICAL NEED FOR HIV PREVENTION, CARE AND TREATMENT



The MUWRP PEPFAR team and the Mukono district Health Team accessing Koome island for the World Aids Day

In financial year 2022, Makerere University Walter Reed Project through the PEPFAR program continued to provide HIV Prevention, care and treatment services to 60,670 clients in 88 supported health facilities. The facilities are in the four districts of Buvuma, Buikwe, Mukono and Kayunga. Of these recipients, 57,700 were adults and 2,970 children.

A total of 50,430 people were tested for HIV. Out of these 1,861 were identified HIV positive (representing a yield of 3.7%). Through index testing, 4,183 clients were identified and offered



A health worker draws blood from a mother for HIV testing at Bbaale HCIV in Kayunga.

testing (2.2 per person) out of whom 524 new HIV positive individuals were identified (a yield of 12.5%). This indicates that index testing is a prospective HIV case finding modality. Important to note, 95% of the cases were linked to treatment. At the same time, the demand for HIV self-testing went as high as 175% with 12,051 kits distributed in Q4 alone.

*PEPFAR program continued to provide HIV Prevention, care and treatment services to 60,670 clients in 88 supported health facilities.*

During this period, 56,406 (96%) received viral load testing of whom 53,195 (94%) were suppressed. The non-suppressed clients—mainly children received intensive adherence counselling. The mitigation strategies they received include: optimization of DTG based regimens, treatment club meetings and viremia clinics, OVC clinical integration at household



The US Deputy Chief of Mission, William Bent (R) and Dr Fred Magala, Director of the MUWRP PEPFAR Program (L) interact with girls under the DREAMS program in Kimmi island

level and transport vouchers for non-suppressed children. The YAPs model of differentiated service delivery was also used to reach out to adolescents and young people living with HIV among others.

Additionally, 2,458 women living with HIV in care received cervical cancer screening and 1,324 were treated. 1,310 HIV-TB co-infected patients were also treated. Under HIV prevention, 5,130 men were circumcised. This was achieved through robust house to house mobilization mix, audience profiling and characterization for each age segment as well as geographical area with tailor made age specific messaging to create demand for VMMC.

A total of 25,634 adolescent girls and young women (AGYW) received age appropriate HIV and Violence prevention services. The services include curriculum-based HIV and violence prevention training, economic strengthening and education subsidies. MUWRP PEPFAR program also reached 4,706 persons with post-gender-based violence (GBV) clinical care services.

The program also reached out to 5,117 Most At-Risk persons with minimum prevention packages. The packages included: BCC/IEC, risk reduction counseling, STI screening and treatment, ART, Adherence support, Socio economic strengthening for AGYWs, engaged sex workers, SGBV screening and Post violence care.

The PEPFAR program works with the Ministry of Health, Ministry of gender, local governments, community-based organizations and civil society organizations. It also ensures continuous improvement in the different areas of work.

The Continuous Quality improvement projects which were conducted covered the areas of testing, PMTCT and TB. Quarterly support supervision was conducted in all sites to achieve quality service delivery. The sites included hard to reach areas like Koome and Buvuma Islands. Trainings and mentorship as well as cross learning with the MHRP International HIV prevention and treatment PEPFAR countries were also conducted.



MUWRP and Mukono district teams carry commodities to Ddamba HCII, Koome Islands



# Clinical Research

## RESEARCH ACTIVITIES

### “Trying to do it as before” - 2022, a year of recovering from the COVID-19 improvisations

When the COVID-19 pandemic hit us in March 2020, the research department had to adapt to the situation and implement research activities in an un precedented manner. However, 2022 has been a unique year, it has been a year of re-organizing ourselves after going through a period of turbulence and uncertainties through the years 2020 and 2021. As the country saw the lifting of nearly all stringent COVID-19 restrictions in 2022, including the reopening of international borders and relaxation in the limitations on gatherings and other general ways of living, MUWRP’s


research department has progressively opened back to full capacity in terms of conducting research, initiating new research projects and stepping up efforts to complete projects whose progress had been significantly hampered by the COVID-19 restrictions.

All the Sections in the department were fully functional and worked very hard to contribute to the overall goal of MUWRP in working resiliently to fully recover from the COVID-19 pandemic. The operational elements under the Research department include; Community Outreach, Quality and Compliance, the AFRICOS study in Kayunga, the Mukono research site and the Research clinic that runs research protocols in Nakasero.




Wamala Amir, the senior pharmacist carrying out a procedure in the MUWRP research phamarcy

## Protocols at the Nakasero Research Clinic

**Study Project**  **TSP-18-03 (The Schistosomiasis Study)**  
 (A Phase I/II Study of the Safety, Immunogenicity, and Efficacy of Sm-TSP-2/Alhydrogel® with or without AP 10-701 for Intestinal Schistosomiasis in Healthy Ugandan Adults)


**Highlight**

- In July 2022, we achieved the enrollment target of 200 participants in Part B of the study. Owing to the difficulties faced in the enrolment due to the quarantines and restrictions in the movement in the past 2 years, this was such a big milestone registered.
- The follow up of study participants during COVID-19 times was aligned to unique approaches such as participant calls and “contact of contact” tracing for those who do not have phones. In 2022, we fully opened up to completing follow up visits in community (shifting from the earlier arrangements of conducting all visits at our research clinic in Kampala)

**Study Project**  **VAT0008 – SANOFI COVID-19 Study**  
 (A parallel-group, Phase III, multi-stage, modified double-blind, multi-armed study to assess the efficacy, safety, and immunogenicity of two COVID-19 vaccines in adults 18 years of age and older)

**Highlight**


- At the end of the 1st phase of the study, we were able to keep our follow up rates for this trial at 100%. MUWRP has over the years maintained very good retention rates in all its studies due to the fact that eligibility criteria is adhered to in selecting participants for research, accurate locator information picked from them and also throughout the study the Community team keeps in contact with them.

**Study Project**  **RV583 – The MOCHI Study**  
 (The primary objective of the study is to determine the rates of new HIV infection in the at-risk population recruited into the study).

**Highlight**

- We enrolled 100 participants within a period of 2 months for the first year of the study. Because of MUWRP’s long term experience in following up and retaining participants in studies so far, the retention rates are very high.

## Protocols at the AFRICOS site in Kayunga

**Study Project**  **RV329 – AFRICOS Study**  
 (A longitudinal cohort study to assess the impact of clinical practices, biological factors and socio-behavioral issues on HIV infection and disease progression in an African context)

**Highlight**

- In 2022 we resumed full in-person visits from abbreviated in-person visits that were conducted during pandemic. The site is currently following 439 participants.
- Enrollment of participants resumed and is more focused on the youth cohort (15-24-year age group) and the current cumulative enrollment stands at 699 participants for both the youth cohort and those above 24 years.

## Community Engagement

In 2022, for the first time since the COVID\_19 pandemic, Community Advisory Boards (CABs) gathered at Maria Flo in Masaka for the Annual Cross CAB Forum that brings together 7 research institutions in Uganda. MUWRP is a co-founder of the National Cross CAB Forum and for this particular edition both the MUWRP – Kampala

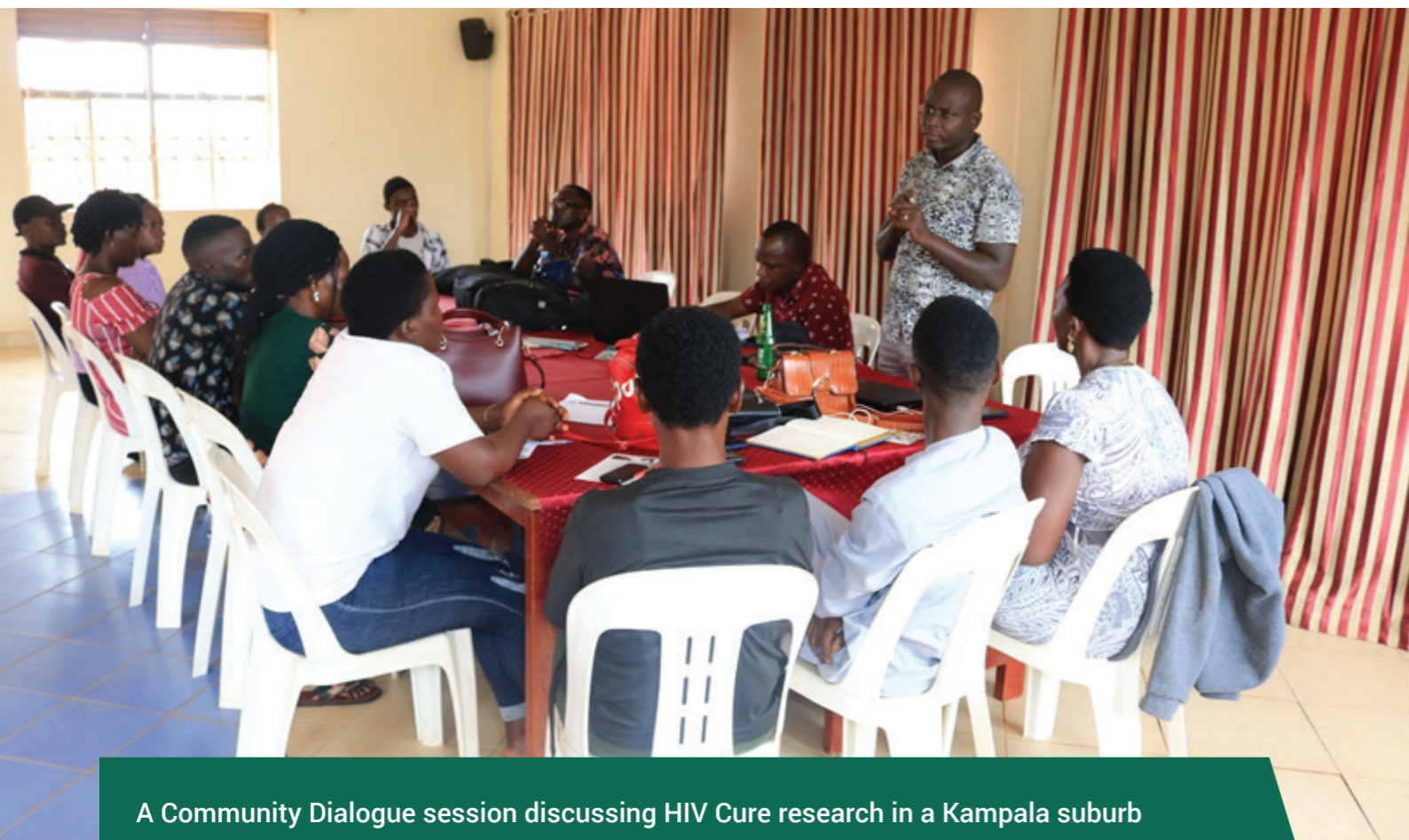
CAB members and the MUWRP – Kayunga CAB members attended the event. The focus and take-home message for the forum was a discussion to embrace National Community Engagement guidelines as the future for Community Engagement practices in biomedical research.



The MUWRP exhibition stall at the 2022 World AIDS Day symposium - MUBS Nakawa

To support recruitment and retention for the MUWRP studies, 2022 rejuvenated the pre-pandemic community engagement approaches including but not limited to; general sensitization of the communities about research, community dialogues with opinion leaders and key persons in the communities to solicit for feedback and development of communication materials that appeal and resonate with the communities. Although it was possible to carry on with Community engagement during the COVID-19 era using digital platforms such as radio, TV and the internet, when we re-instated the traditional approaches in 2022 we underscored the impact of interpersonal connections for successful Community Engagement.

With MUWRP joining the HOPE Collaboratory with research labs from other 15 institutions across the world to develop potential therapeutics from the drugs studied in the labs to come up with an HIV cure using the “Block-lock-excise” approach, the community outreach team conduct community engagement activities to particularly create awareness about HIV cure research including; Community dialogues with people living with HIV and key populations, Media cafes and National level advocacy discussions with the Civil society organizations. During these engagements it came out clearly how HIV cure research is a new topic in Uganda and indicated the awareness gaps among the target populations, thus a need for intensified community engagement.



A Community Dialogue session discussing HIV Cure research in a Kampala suburb

*MUWRP is part of the HOPE Collaboratory where, research laboratories from 15 other institutions across the world are working to develop an HIV cure using the “Block-lock-excise” approach.*

### Pharmacy:

Post the pandemic restrictions, the pharmacy was excited to have immensely contributed to the success of the studies conducted at the Nakasero Research Clinic as well as supporting other MUWRP studies implemented at the satellite research centers. For TSP-18-03, the Pharmacy supported 100% enrolment vaccination and also completed all follow up vaccinations while for the SANOFI study, the pharmacy supported follow up vaccinations of the 50 participants who participated in the primary vaccination series. The pharmacy also supported the importation of drug commodities as per the institutional requirements as well as support other MUWRP studies under the JMEDICC program in Fort portal. Research pharmacies were established at different Ebola treatment units to support research in the September 2022 outbreak in the Country. In 2022, the MUWRP pharmacy was also selected as the potential depot pharmacy for the AIM COVID-19 vaccine trial to support storage and distribution of the Investigational product to over 5 clinical research sites in Uganda.

Having completed the activities above, the Pharmacy embarked

on preparation activities pertaining to pipeline studies expected to start in the year 2023.



### Quality and Compliance:

Post COVID-19, the Compliance section successfully prepared, coordinated and accomplished submission of research protocols to local and international regulatory bodies for review and approval. The section also prepared and coordinated 2 joint review meetings for the Sinocelltech and Remdesivir (MEURI) studies that were conducted by the UNCST, UVRI REC/MUSPH IRB and NDA. The Remdesivir

(MEURI) study went on to receive full approval while the Sinocelltech study was withdrawn by the sponsor prior to receiving NDA approval

The section is currently working on having two new studies (RV 591 (HIV vaccine trial) and SABIN-002 (Marburg vaccine trial) approved at all the regulatory bodies and hope to receive all approvals for these by October and July respectively

The Quality section successfully supported the smooth running of the existing studies in the clinic to include TSP-18-03 a schistosomiasis vaccine study, VAT00008 (Sanofi) a COVID-19 vaccine study and the new observational study RV 583 whose implementation kicked off in October 2022, through continuous quality assessments and quality assurance activities as well as spear heading training of study staff.



*Having completed the activities above, the Pharmacy embarked on preparation activities pertaining to pipeline studies expected to start in the year 2023.*

## Visitors:

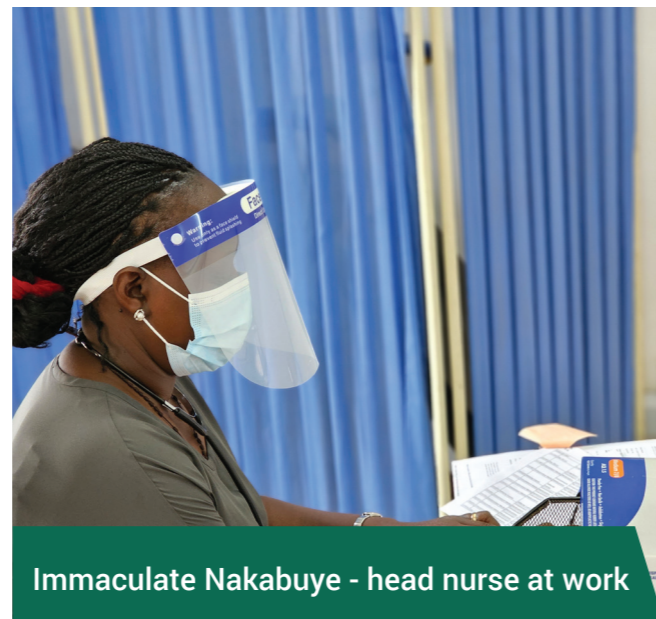
During the year 2022, the Research Clinic was honored to host a number of visitors from collaborating institutions, sponsor teams as well as regulatory authorities in Uganda. Amongst these was a team from George Washington University and MHRP team for ongoing studies of schistosomiasis and RV 583.



The TSP Study Team from George Washington University (GWU) visits Kasenyi landing site

## Future plans:

To further develop the research portfolio at MUWRP, in the new year we shall continue to engage with different funding agencies, national and international collaborators for more clinical research opportunities. By the end of 2022, there were also a number of protocols which expect to kick off in 2023 as we also ensure good compliance of the participants in the studies that recruited in the past year. We shall also continue look for opportunities to participate in scientific meetings and conferences to share new findings and innovations in research and learn from colleagues and peers.



Immaculate Nakabuye - head nurse at work

# Emerging Infectious Diseases Program (EIDP)

# HOW MUWRP IS CONTRIBUTING TO UGANDA'S GLOBAL HEALTH SECURITY AGENDA



The DoD/ WRAIR Contingent at Kiruddu National Referral Hospital Laboratories Checking on Anti Microbio Resistance Works

The Emerging Infectious Diseases Program (EIDP) oversees MUWRP's contribution to global health security. Rolled out in 2007, the program contributes to the Ugandan Ministry of Health's (MoH) efforts towards mitigation, early detection and robust response to emerging and re-emerging infectious diseases threats in the country. The program leverages innovation, surveillance, research and health systems strengthening approaches to strengthen Uganda's global health

security through: sharing epidemic intelligence information on human and animal respiratory pathogen circulation, enteric pathogens, vectors, and antimicrobial resistance with the Ministry of health, the Ministry of Agriculture Animal Industry and Fisheries, Ministry of Defence and Veterans Affairs/UPDF, as well as with other local and international stakeholders. Funding for the program is mainly through the US Department of Defense (DoD) Global Emerging Infections

Surveillance Section (GEIS), the National Institute of Health, Allergy and Infectious Diseases (NAID), and the Defense Threat Reduction Agency (DTRA).

## WHERE EIDP IMPACTED IN 2022

During the year 2022, the health sector witnessed an unprecedented global increase and spread of monkey pox (now Mpox) to over 115 countries: mostly in Europe and the Americas. This brought to light possible new modes of transmission. The SARS-CoV-2 also continued to mutate, spread, and exact significant financial implications and was a matter of great concern. Here in Uganda, 2022 saw outbreaks of yellow fever, Ebola, rift valley fever, malaria, Crimean Congo haemorrhagic fever, influenza, among others.

To address these new threats, epidemic intelligence and preparedness through surveillance remained key to prevention, early identification, and response. EIDP contributed to Uganda's surveillance efforts by implementing six strategic projects, namely:

1. Influenza and other respiratory pathogens surveillance among humans in Uganda
2. Antimicrobial resistance surveillance in healthcare associated infections (HAI)

bacteria and STI (Neisseria gonorrhoea and Mycoplasma genitalium) in Ugandan civilian, military and high-risk populations.



EIDP team at the UVRI lab

3. Detecting Emerging Zoonotic Viruses at the human-animal-environmental interface(s) in Bats, Swine, Poultry in Uganda
4. Acute undifferentiated febrile illness surveillance in military and civilian populations in Somalia
5. Acute febrile illness and vector-borne pathogens surveillance in military and civilian populations in Uganda
6. And Surveillance of acute gastroenteritis (AGE) in the military in Somalia.



Bat sample processing at Gulu

## KEY HIGHLIGHTS ATTAINED

- For FY 2022, EIDP met 100% enrolment targets for four of its six projects, 70% for the AFI Somalia project, and 40% for the Enterics Somalia Project.
- Over 2700 ILI/SARI samples collected, with Adenoviruses, Flu A, Respiratory Syncytial Virus – A, Human bocavirus, SARS-CoV-2, and Flu B circulation at; 12.5%, 10.2%, 7.3%, 6.4%, 2.9%, and 2.4% respectively.
- 800 cloacal and oropharyngeal swabs and corresponding sera collected from live bird markets and analysed. The overall prevalence of Flu A in poultry was 38.25%.
- 397 nasal swabs and corresponding sera collected from swine, and the prevalence of Flu A in swine was 1.26%
- For AMR, 946 pathogens were isolated from 2,322 samples.
- For AFI Somalia, 153 participants were enrolled, and a total of 756 samples collected. The most prevalent causes of acute fevers were SARS-CoV-2 (11.41%, n=17/149), Flu A (6.71%, n=10/149), and adenoviruses (4.70%, n=7/149)
- For AFI Uganda, 406 participants were enrolled, and a total of 1,516 samples collected. The most prevalent causes of acute fevers were Plasmodium for both sites, Flu A (12.03%, n=18/158) and Rift valley fever (6.63%, n=10/151) for Bwera hospital
  - EIDP sent all program reports including weekly, monthly, and annual technical, financial, and programmatic reports with the U.S. Army Medical Research Directorate–Africa (USAMRD-A) and the Henry M Jackson Foundation for the Advancement of Military Medicine (HJF).
  - EIDP provided the MoH with 52 data reports on influenza and other human respiratory pathogens for inclusion in the MoH weekly epidemiological reports
  - In 2022, EIDP welcomed the Director of the U.S. Army Medical Research Directorate–Africa (USAMRD-A) Col. Shannon Lacy, and the Director, Emerging Infectious Diseases Branch Maj. Boudreaux Daniel Mark. His team visited select MUWRP surveillance sites and strengthened commitment towards supporting GEIS activities



DoD/WRAIR team at the Kiruddu National Referral Hospital ILI/SARI Research point for a Brief

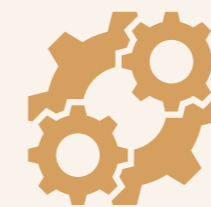


ILI/SARI feedback Session Jinja Regional Referral Hospital

## EIDP's STRATEGIC DIRECTION

EIDP is to continue to position itself as a leader in surveillance for emerging and re-emerging infectious diseases in Uganda. Over the next one-year EIDP this is what is planned:

- Consolidation of the Program's current surveillance efforts within public, civilian and military health settings
- To Seek out partnerships with local and international players in the emerging infectious diseases arena
- Continue to support the MoH with epidemic intelligence information on; human respiratory pathogens surveillance including SARS-CoV-2, causes of acute fevers in Uganda and Somalia, trends in antimicrobial resistance, and causes of acute enteritis among military personnel.
- Evolve into global health security implementation science and health systems strengthening.
- EIDP published two papers on its efforts, that is: Genetic Evolution of Avian Influenza A (H9N2) Viruses Isolated from Domestic Poultry in Uganda Reveals Evidence of Mammalian Host Adaptation, Increased Virulence and Reduced Sensitivity to Baloxavir, and Molecular Characterisation of Human Respiratory Adeno Viruses in Uganda



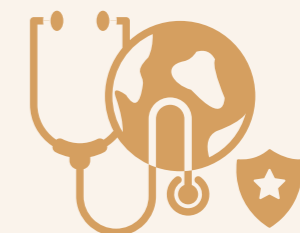
Consolidation of the Program's



Seek out partnerships with local and international players



Support the MoH with epidemic intelligence information on; human respiratory pathogens surveillance



Evolve into global health security implementation science and health systems strengthening.



# Resource mobilization through grants writing

## RESOURCE MOBILIZATION through grants writing – the 2022 experiences

The Makerere University Walter Reed Project (MUWRP) Grants Office was started way back in 2015 with the objective of supporting resource mobilization for the institution and to specifically centralize grant application and acquisition at the Makerere University Walter Reed Project. The office is involved in all pre-award and post-award process, right from idea inception conception to award close-out.

### Our focus areas include;

- a) Sustainability of the Grants office and Resource Mobilization
- b) Capacity building and professional development in the areas of grants writing and management.
- c) Fostering networks and collaborations in grants writing

### Activities of the MUWRP Grants office

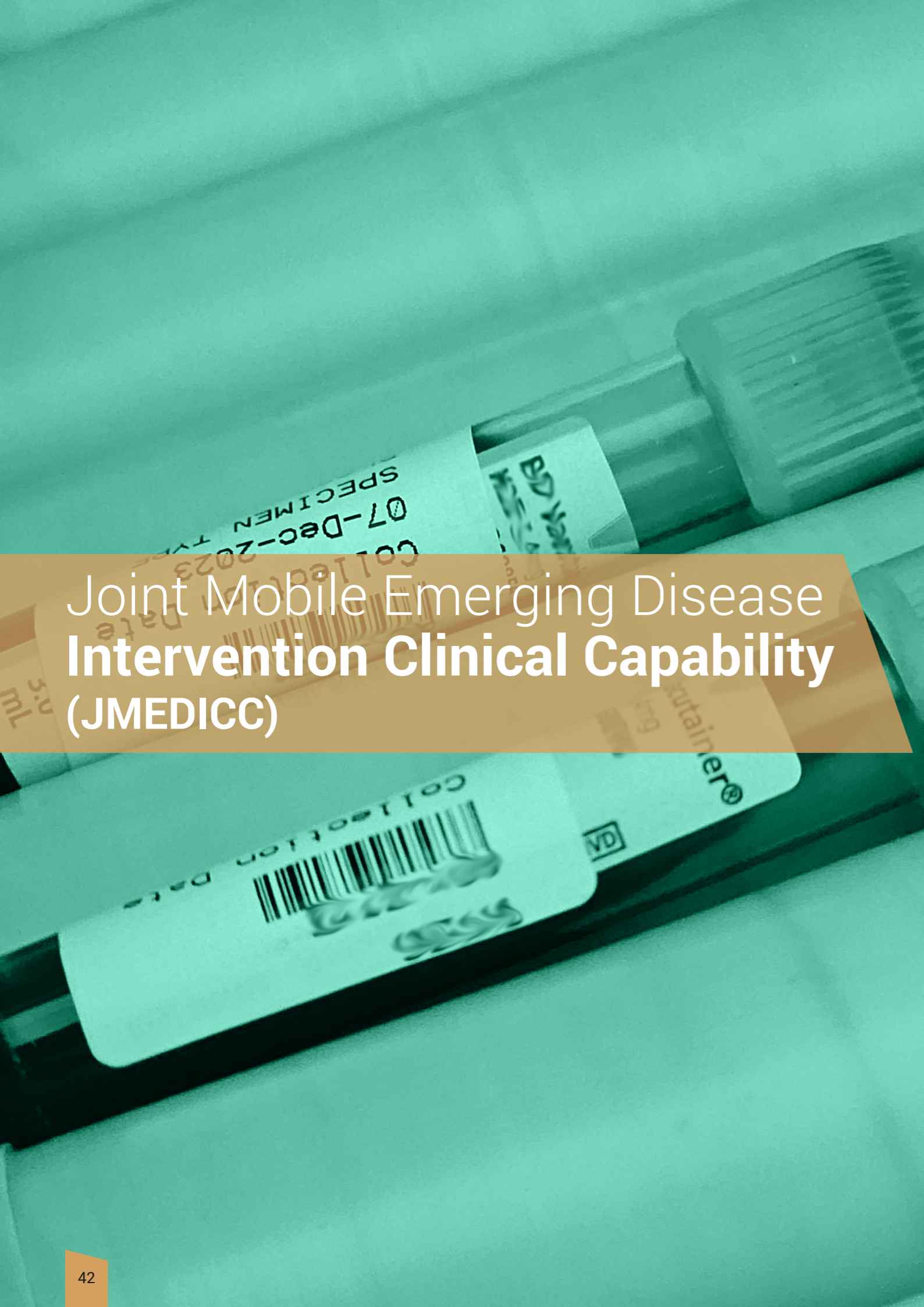
Some of the activities of the Grants office at MUWRP include:

- 1. Identifying, sharing and providing information and advice on funding opportunities.
- 2. Supporting the Proposal development process and submission of completed grant applications to funders.
- 3. Supporting the grants management and filing structures and systems.
- 4. Developing grants management as a business unit.
- 5. Developing and implementing grants writing mentorship courses.

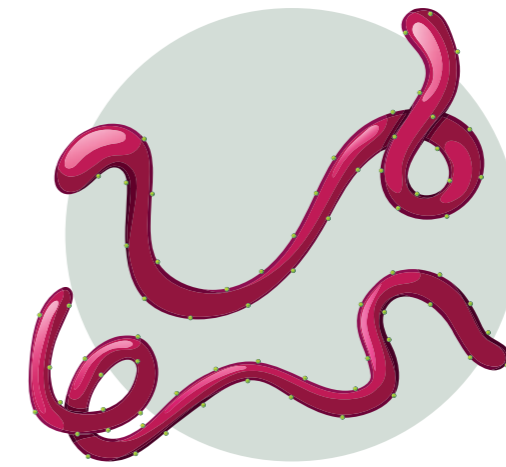
In the Grants office, 2022 was a year of impactful efforts, realization of milestones and setting up plans for the new financial year 2023/24. We witnessed tremendous improvement in our grants application efforts evidenced by the list of grants submitted especially those that were successful

and awarded. We also witnessed improved attendance and participation in our Wednesday and Friday Grants writing meetings sessions where MUWRP researchers conceptualize and develop new proposals.

No.	Grant Name	Status
1	Leveraging the AFRICOS network to meet the needs of youth living with HIV in Sub-Saharan Africa” <b>Site PI- Micheal Ssemogerere</b>	<b>Submitted , Not awarded</b>
2	“Phage-nanomaterial combination prophylactic and therapeutics against MDR wound pathogens/ infections. <b>Site PI: Prof. Denis Byarugaba</b>	<b>Re-submitted</b>
3	Improved Praziquantel Delivery to Eliminate Schistosomiasis in High-Risk Settings in Uganda (PZQ4ALL) <b>PI: Grace Mirembe</b>	<b>Submitted , Not Awarded</b>
4	Improved Gender-Based Violence (GBV) Screening and Case Identification Strategy for HIV Clinical Settings in Uganda. <b>PI: Anne Nakirija</b>	<b>Submitted, Not awarded</b>
5	Strengthening Uganda’s Biosecurity to Minimize Non-State Actors’ Access to Weaponizable High Consequence Pathogens (SURMISE).	<b>Submitted, Not Awarded</b>
6	Implementing HIV/ Cervical Cancer Prevention ‘CASCADE’ Clinical Trials in Uganda (CASCADE-UGANDA). Funder: NIH. 2022 to 2026. Award: 250,000/ year. <b>PI: Betty Mwesigwa</b>	<b>Awarded</b>



## Joint Mobile Emerging Disease Intervention Clinical Capability (JMEDICC)



## PRIMED TO DEAL WITH EBOLA VIRUS

From inception in 2002, MUWRP's programs have grown to include the JMEDICC program. The JMEDICC program was established in 2017. It was designated as a platform infrastructure critical to trials meant for medical countermeasures to deal with filovirus (Ebola/Marburg) outbreaks. It does this by conducting clinical trials in outbreak settings. Following the lessons learned from the 2013-2016 west Africa Ebola outbreak, that saw over 28,000 infected persons and over 11,000 deaths in a span of 3 years; it became imperative to plan and prepare to test therapeutics and other countermeasures during outbreaks in Uganda.

The JMEDICC program commenced its operations in 2017 at the Fort Portal Regional Referral Hospital. The hospital serves 7 districts in the Rwenzori region. The region also borders the Democratic Republic of Congo, a hotspot for EVD.

Over the years, MUWRP together with international collaborators have built the JMEDICC program capacity to test therapeutic interventions during EVD outbreaks.

### Building the Muscle for Enhanced Ebola Virus Disease (EVD) Research

In order to carry out clinical trials in an EVD outbreak setting, the JMEDICC program has invested in infrastructure developments and built strategic relationships. These investments include: (1) an enhanced 6-bed isolation unit with ICU capabilities that is suited to manage Ebola patients, (2) a highly trained team in research, clinical care for critically sick patients and Infection Prevention and Control (IPC) in highly infectious disease settings, (3) development and deployment of a static as well as a mobile laboratory with clinical care and EVD diagnostic capability suitable for handling pathogens of high consequence and (4) a strong community engagement team and strategic partnerships with different partners for a common goal.

*Over the years, MUWRP together with international collaborators have built the JMEDICC program capacity to test therapeutic interventions during EVD outbreaks.*



Patient management in the isolation ward

### JMEDICC Contribution During the 2022 Ebola Sudan Outbreak in Mubende

Working together with the Ministry of Health (MoH) and international partners, the MUWRP and IDI JMEDICC program supported the 2022 Ebola Sudan outbreak response in several ways:

**Training:** The program's highly trained and skilled team provided just in-time didactic and hands-on training in Infection Prevention Control (IPC) to healthcare workers involved in the response. IPC are the practices concerned with preventing infection during infectious disease epidemics. The JMEDICC staff were also in charge of ensuring safety of the health workers at the Ebola Treatment Units (ETU).

*Working together with the Ministry of Health (MoH) and international partners, the MUWRP and IDI JMEDICC program supported the 2022 Ebola Sudan outbreak response in several ways.*



Dr. Stephen Okello – the JMEDICC Program Manager (in the middle – white T-shirt) sharing a group photo with the Minister of Health and other development partners involved in the Ebola Outbreak response.

### Capacity Building During the Recent Ebola Outbreak in Mubende and Kassanda

**Clinical Care:** At the beginning of the ebola virus disease outbreak, the MoH Ebola National Task Force, designated the JMEDICC isolation unit as a treatment unit for healthcare workers

diagnosed with the disease. Working together with MoH staff, the JMEDICC team diligently managed seven (07) healthcare workers at the unit. The staff used advanced technologies such as the point of care ultrasound scan to provide targeted management of the patients. The team also supported clinical care at both the Mubende and Entebbe ETUs.



JMEDICC IPC team exercising unique technical practices to ensure patient safety and quality care. (IPC)

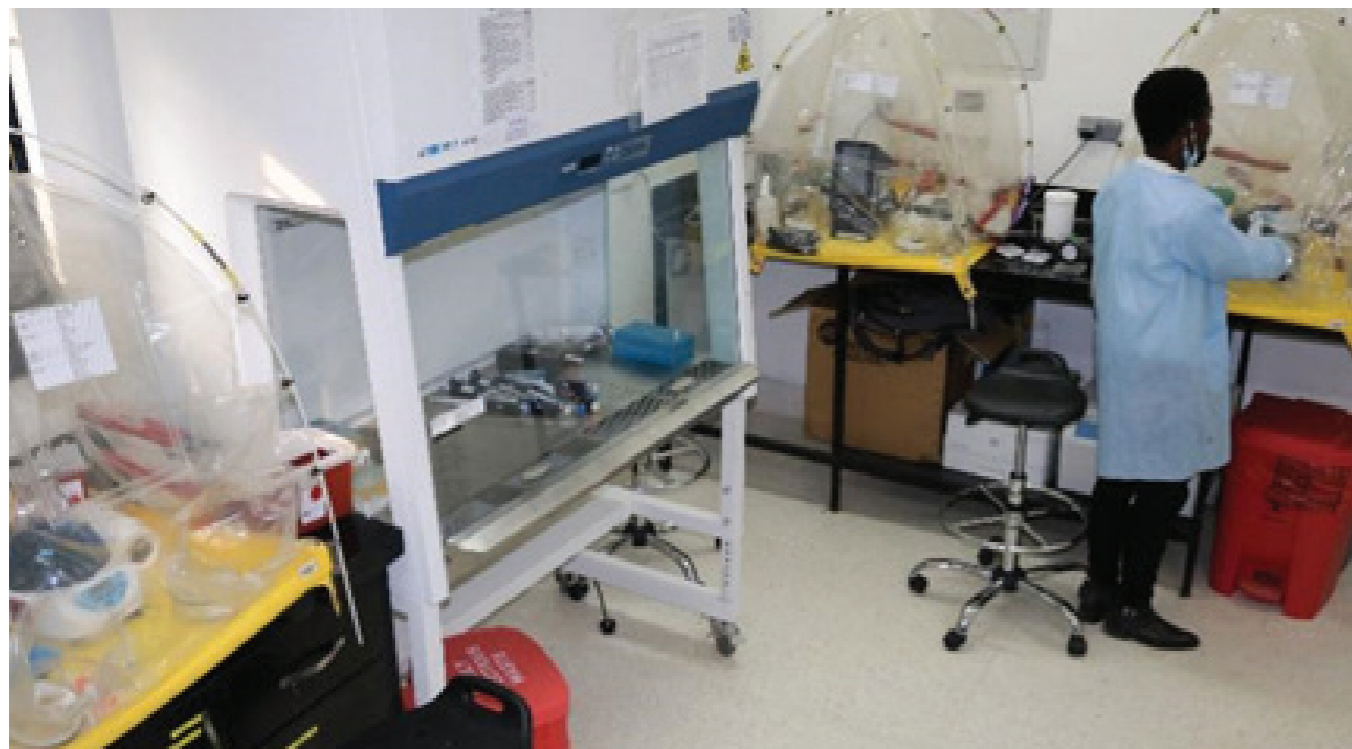
**Set-up of Mobile Laboratories in the Outbreak Epicenters:** JMEDICC working with the Central Public Health Laboratories (CPHL), deployed mobile laboratory capability at both Mubende and Entebbe ETUs. The JMEDICC Lab team supported lab training and setup. In addition, the mobile laboratories provided clinical testing

that was crucial in the timely treatment of the patients during the outbreak response. Through this arrangement, JMEDICC successfully demonstrated the importance and usefulness of mobile laboratories in safe handling of high consequence pathogens for outbreak response.



Members of the MUWRP and IDI JMEDICC teams at an Ebola national event in Mubende

MUWRP is proudly partnered with IDI in the **Joint Mobile Emerging Disease Intervention Clinical Capability (JMEDICC)** program at the Fort Portal Regional Referral Hospital (FPRRH) in western Uganda, and recognizes the leadership and staff of IDI, both past and present.



A Technologist at the JMEDICC Fort Portal Laboratory



# Data Management

# Data Management for Research in a Highly Infectious Setting: **the JMEDICC experience from the MEURI Study**

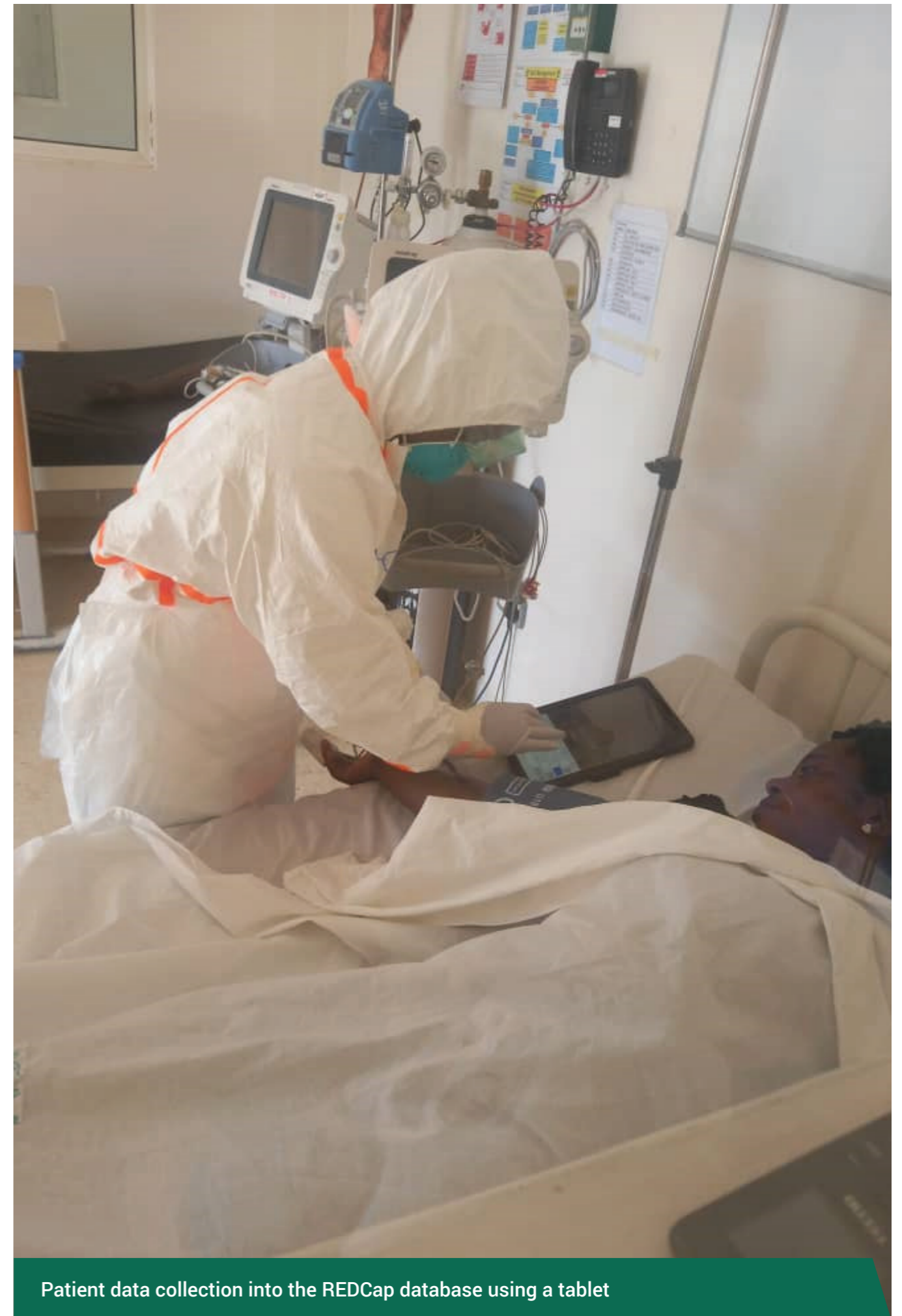
As earlier mentioned, when EVD was confirmed in September 2022, the JMEDICC program supported the outbreak response together with other development partners, under the leadership of the Ministry of Health.

Most notably for the JMEDICC program at this time, the MEURI (Monitored Emergency Use of Unregistered and Investigational Interventions) protocol for Remdesivir, was activated, with Remdesivir being the investigational drug to be administered to study patients infected with EVD. Consequently, study site teams and infrastructure were deployed to EVD treatment centers to facilitate active patient enrollment into this protocol.

Conducting a clinical trial in a high consequence infectious disease setting (EVD in our case) poses numerous challenges, not only in patient and sample specimen management, but also in data collection, documentation and data management. For example, the traditional and commonly performed research processes pertaining to storage and quality control processes for informed consent forms (ICFs) and paper-based case report forms (CRFs) cannot be performed using the same procedures in a highly infectious setting, without posing additional risk to study staff. In the MEURI study experience, administered paper ICFs were to be carefully photographed from the EVD treatment hot zone using secure study tablets and scanned to stations outside of the hot zone via a secure private local area network (LAN). The ICFs were then to be transferred onto dedicated and secure digital file folders, enabling the performance of ICF quality control reviews, printing, and long-term storage of the ICFs for future reference. Lab results were also relayed from the lab stations

within the hot zone, to the clinical and QC team using a similar mechanism and infrastructure for clinical management of cases/suspects. Study patient data for the study was to be collected directly into a robust and validated REDCap EDC (electronic data capture) system or database via electronic CRFs using portable hand-held study tablets; no paper-based CRFs were to be employed. Each study staff using REDCap was assigned a unique small portable device known as a DUO token or fob to facilitate access to REDCap via a two-factor authentication procedure. This was done to enhance the security controls of the REDCap EDC system while also acting as a check to ensure that data collected into REDCap was being collected under the correct individual user's account at all times and thereby attributable to the true data collector, in accordance with FDA and other regulatory guidelines. All devices including tablets and DUO tokens were carefully sanitized after use and not allowed to leave the hot zone.

Despite full deployment of the data and IT infrastructure, and data SOP trainings accorded to the clinical teams, the study was not able to enroll a patient into the study. This was attributed to subsequent non-observance of EVD incident cases following deployment of personnel and infrastructure. However, the outbreak offered a valuable first-hand experience and tested the readiness of IT and data capabilities in deploying the requisite infrastructure and implementing all data processes in accordance with the Data SOP. With more funding in future, the site plans to acquire additional and advanced mobile infrastructure to enable faster deployment and enhance our capacity for mobile deployment in remote settings with limited facilities, such as areas without internet connectivity.



Patient data collection into the REDCap database using a tablet



# Technology Support Services



TSS ICT Service Analyst installs antenna to boost network connectivity at Kawongo HC II

## SEAMLESS HEALTH CARE DECISION MAKING THROUGH ICT

In a ground-breaking initiative, the Technology Support Services (TSS) through the PEPFAR program has successfully implemented point-of-care (POC) infrastructure across multiple health centres in four supported districts. The innovative approaches bring medical diagnostics, testing, and treatment closer to the patients, revolutionizing healthcare access and delivery.

With POC infrastructure, medical services are now provided at or near the location where patients seek care. This strategic shift has eliminated the need for centralized laboratory facilities, ensuring faster and more efficient healthcare

services. Real-time decision-making has become possible, empowering healthcare providers with the ability to make critical decisions instantly.

### Harnessing Technology

Through the dedicated efforts of our Technology Support Services team, Technology Support Services have facilitated the installation and deployment of essential equipment in the health facilities. This has not only enhanced the quality of care but has also significantly reduced the implementation costs of Electronic Medical Records (EMR) systems across the program.

*In a ground-breaking initiative, the Technology Support Services (TSS) through the PEPFAR program has successfully implemented point-of-care (POC) infrastructure across multiple health centres in four supported districts.*



Point Of Care (POC) Equipment installed in Koome Health Center IV

### The Impact and Improved Healthcare Efficiency

Patients now experience faster and more streamlined healthcare services, leading to enhanced patient satisfaction and better health outcomes.

### Cost Savings

The adoption of POC infrastructure has resulted in substantial cost reductions in implementing EMR systems, allowing for more efficient allocation of resources.

### Enhanced Decision-making

Real-time access to diagnostic information empowers healthcare providers to make informed decisions promptly, ensuring timely interventions and personalized treatment plans.

### Strategic Direction

The implementation of POC infrastructure aligns with MUWRP's strategic vision of strengthening healthcare accessibility and delivery. By bringing medical services closer to the patient, this aims to

bridge the gap between healthcare facilities and the communities they serve. This strategic shift emphasizes MUWRP's commitment to providing innovative solutions that improve healthcare outcomes and overall well-being.

### Next Steps

Building on this success, MUWRP is now focused on expanding the POC infrastructure to additional health centres and districts, extending the reach of efficient healthcare services. The project is actively exploring partnerships with local stakeholders, leveraging technology advancements, and continuing to enhance our services to meet the evolving needs of the communities that are served.

*Real-time access to diagnostic information empowers healthcare providers to make informed decisions promptly, ensuring timely interventions and personalized treatment plans.*

# Human Resource

# FINDING THE RIGHT BALANCE AND STANDARDS OF HUMAN RESOURCE PRACTICE AT MUWRP

The Human Resource (HR) practice at MUWRP has continued to mutate from a basic logistical operations coordination unit to handling issues of strategic nature. The evolving workspace is slowly placing it at the center of shaping the overall people agenda. MUWRP continues to develop phenomenal programmes to nurture great talent and future leaders. Its ultimate agenda is to build a robust workforce, enhance the Employee Value Proposition (EVP) and overall workplace experience.

## INTRODUCING EMPLOYEE WELLNESS AT MUWRP



MUWRP staff during a wellness session in Fortportal

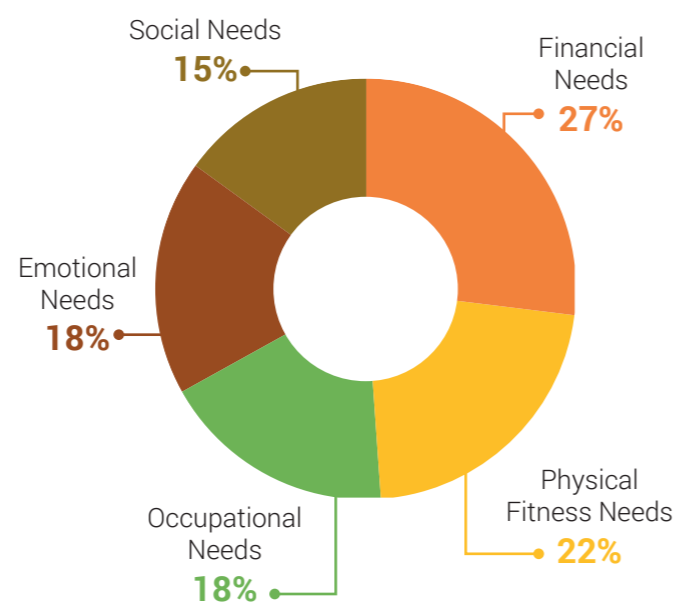
The subsiding of the global Covid-19 pandemic in 2022 gradually effected a return-to-work, notably in the physical workspace. However, it became very apparent that the pandemic had devastating effects on staff well-being; which also impacted on their performance at work. Employee wellness quickly became a key area of interest to ponder upon, and HR recognized the need to strategize on how to help staff cope with the aftermath of the pandemic and emerging challenges.

Subsequently, the employee wellness initiative was introduced in June 2022. This initiative was

designed to provide solutions to the various challenges staff were facing within and outside the work environment.

In order for the HR department to understand the specifics of employee wellness needs, a survey was conducted to map out their key areas of interest. The results of the survey indicated the following as pressing areas of interest:

### MUWRP Staff Preferences



A committee with staff representation across all departments was constituted, to collaborate with the HR team in coordinating the various activities across the organisation.

As a pilot, we have an ongoing working arrangement with various stakeholders and service providers who are providing invaluable insights in the following areas:

- Nutrition and wellness
- Lifestyle management
- Achieving financial freedom
- Building wealth
- Managing debt

Our key partners in this journey have been UAP Old Mutual, National Social Security Fund, Prudential

Insurance, Standard Chartered Bank, Dr. Jucent Asiimwe (Expert Nutritionist) and some MUWRP specialist staff.

## SUSTAINING A DISTINCT TALENT PIPELINE

During 2022, MUWRP continued to shape a workforce that reflects the kind of support it provides its patients and communities. We used the limited resources available to attract, retain, and develop talent throughout the organisational hierarchy. Attracting talent with diverse skillsets and capabilities has continued to transform our organisation.

Most importantly, our recruitment and sourcing direction endeavors to identify candidates who genuinely desire to make a difference in healthcare. Chances are that such candidates are more impactful and true to their professions. We have also continued to pursue deliberate effort in inclusion and diversity by targeting underrepresented groups of talent and Women in Science. This has been and continues to be a learning journey. We support them in their professional and leadership journeys required to sustain our grip on key talent.

### Our hiring channels

MUWRP is alive to the reality of the worldwide phenomena commonly referred to as 'the war for talent'. We have continued our quest in perfecting our talent acquisition mechanisms in order to sustain an effective talent pipeline. Our nature of business requires reliable and long-term professionals who possess the right aspiration and value system. Our support framework in recruitment relies on advertisement to the public to provide equal employment opportunities in rare cases, we also use headhunters, employee referrals, and recruitment consultants. This effort has continued to keep us afloat amidst a turbulent and volatile employment landscape.

## CULTURE & CHANGE JOURNEY- SHAPING OUR LEADERSHIP

Achieving or sustaining excellence in biomedical research is directly proportional to the quality of leadership. At all levels of the organisation, it has been imperative for us to synchronize and create inclusive leadership personas or behaviours. MUWRP launched a couple of

initiatives including its Leadership Mastery and Supervisory Effectiveness training programme. These are efforts designed to provide a structured development path to all employees aspiring to rise to mid-level or senior managerial roles.

Initiatives like these outline the expected working approach for especially Middle-level Managers and Supervisors irrespective of career level. This journey is a self-reflection not only to enable us think about the past and present, but to plan for MUWRP in the future which has hallmarks of highly uncertain and turbulent times. Whether one leads a small team or a larger team or the entire organisation, self-reflection is crucial for improving our leadership mindset and planning for the next phase of our journey.

## OUR BULL'S EYE PLANS FOR THE FUTURE

A strong strategic focus will be necessary to continually deliver on our mandate as times get more challenging. The challenging part will be to orient the mindset of our talent from doing the things right to doing the right things.

### Our 3Es Approach

We are painstakingly but surely building a culture of continuous learning and professional development using the 3Es approach; Experience, Exposure and Education. All employees including those on contractual terms or cross-functional stretch assignments will have access to a wide range of learning platforms designed to enhance their potential.

### Research Ideation

The HR department hopes to roll this initiative out to all employees. Through this platform the MUWRP will encourage and recognise employees for new ideation and to explore and try new differentiated ways of expanding MUWRP's mandate.

## MUWRP Accelerate Programme

This is another initiative that Human Resource Department is intent on building and making better. MUWRP career development programme will see selected talent moved across functions and geographies and given meaningful stretch assignments. In so doing, we are hopeful that key talent will feel more engaged and valued.



# Supply Chain

## STREAMLINING SUPPLY CHAIN CHALLENGES

The Supply Chain Section (SCS) of MUWRP is mandated to manage all procurement related activities. These activities range from procuring supplies, services and works. The procurement ordering process has several levels of stakeholder participation. There has therefore been a need to have a system in place that can fast track all the various levels of approvals or participation to be able to meet timelines for different supplies. Accordingly, the MUWRP procurement section has transitioned from a manual paper ordering system of procurement to an on-line system called Fraxion.

There has been a significant shift and improvement in processes since transitioning from the manual system to an online one. Here are some of the achievements as the result of the on-boarding of the Fraxion system:

### Visibility of the entire ordering process for Purchase Requests and Purchase orders

With this system, SCS has visibility of the entire process from the start to the end and in real time. As a result, the turnaround time of the approval process has greatly improved compared to what it was back then in the manual system. This has helped us to ensure timely delivery of supplies. It has taken away the challenges of stock outs or emergency procurements caused by delays in manual process which were quite costly.

*With this system, SCS has visibility of the entire process from the start to the end and in real time. As a result, the turnaround time of the approval process has greatly improved compared to what it was back then in the manual system.*

Old Purchase Request Paper Form

New Online Purchase Request & Order Processing System

\*See a snap shot of what the Fraxion system looks like.

## Departmental Purchase order/ Purchase Request management reports

SCS is now able to process real time departmental procurement reports to support management decisions on MUWRP spending. These reports focus on spending in view of departmental procurement plans for the FY which helps the team to view their planned procurement Vs actual department procurement. With this, different departments are now able to align their activities within the planned quarters and because of this, procurement activities have been handled in a very timely manner. This has resulted in a very smooth end of Financial year. It has also taken away the issues unspent funding.

## Impressive turnaround times for Purchase requests & Purchase orders processing

Under the manual system, documents had to be moved physically from one approval to another. This was challenging due to situations of documents getting lost in transit or at one's desk for weeks before approval. As a result the approval processes would be prolonged and even stretched for months depending on the scenario. With the on-boarding of Fraxion, this has reduced to only one week for all the approval levels. For emergency orders, the process now takes only one day. This great achievement has resulted into smooth operations in the different sites and now there are zero issues of stock outs.

## Automation and remote working

The most common problem faced with the formal manual system was human error. For instance, a person could capture incorrect data in a spreadsheet and this would end up being processed as it were. There were also challenges when requests would have to wait if the responsible person was out of office during emergency leave. With Fraxion, personnel

can work remotely which is a big plus. Today, regardless of whether the approvers are absent from office, requests can now be completed in a timely manner. Automation has also reduced errors to zero.

## Increased volumes of PO & PR processing

With automation the SCS is able to process a larger amount of purchase requests and orders for the different departments on a daily basis, which wasn't attainable under the manual process. This was because it involved physically shifting documents from one level to another. Efficiency has now been attained throughout with Fraxion.

## Contracts expenditure management.

Fraxion allows SCS to populate expenditure reports on departmental contracts for the different periods. This can be per service completed or the total expenditure on service contracts, consultants or Sub-grantees which supports planning and budgeting.

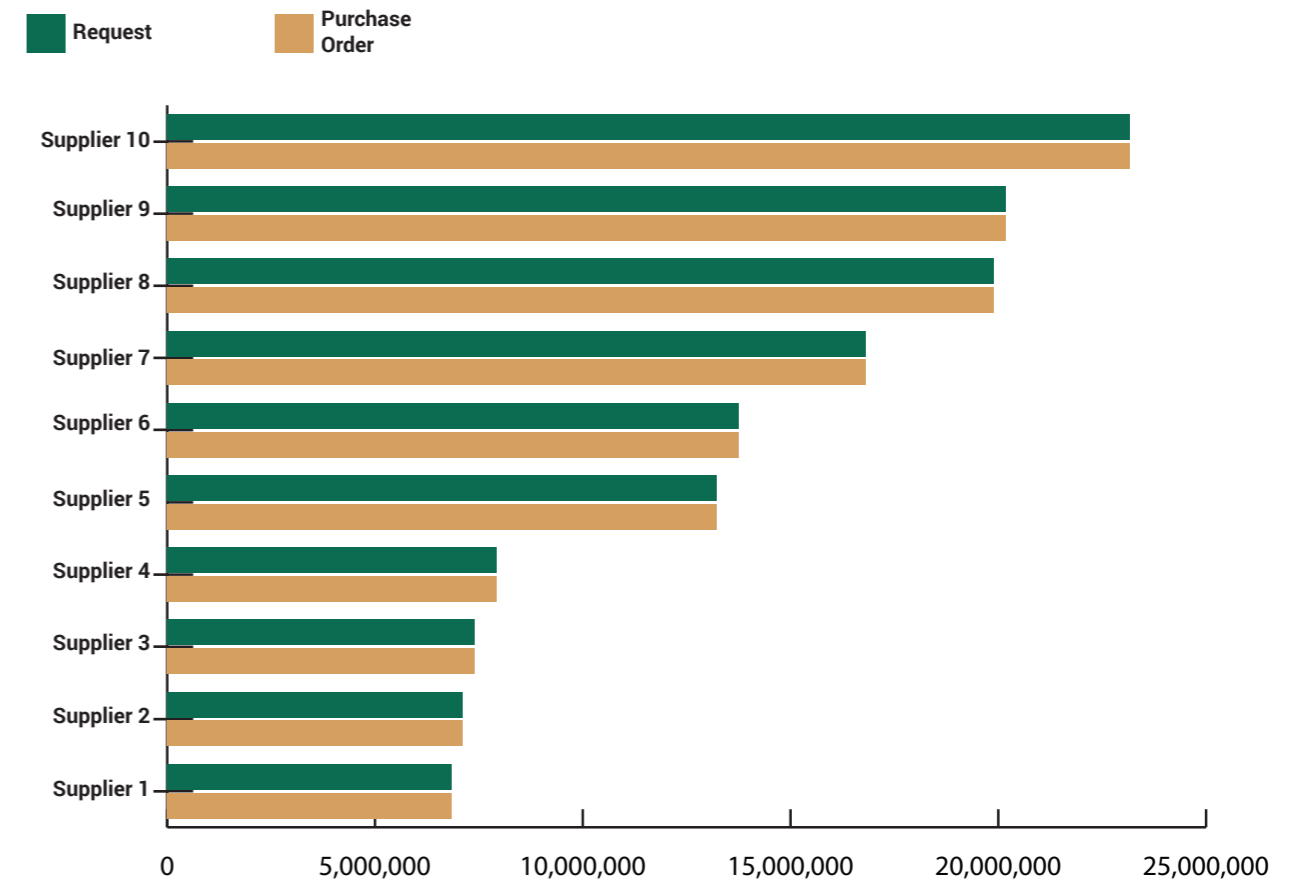
## Easy tool for various analytics as seen below;

This system, has enabled the population of various reports from the different departments. It is able to provide data on several procurement related matters for decision making which was practically very challenging in the manual system. Below are some of the examples;

## Supplier Analysis Report (January to December 2022)

The report below visualizes the total value of various document types created against our system vendors as seen below, over a set period of time. We can see what has been generated in monetary terms for all vendors in the system

## Spend by/ Employee Request Analysis Report



## Spend by Employee Analysis Report: Period 12/1/2022 - 12/31/2022.

This report visualizes the total value of the selected document type created against the selected company's employees, over a set period of time. So, you can see what a particular requester employer has generated overtime (note the period captured)

**Total Purchase orders: 177,395,283**

## Control over procurement activities

With Fraxion SCS staff have greater flexibility and control over every aspect of the MUWRP procurement process. From controlling who can

input an order to who can approve purchases and lastly who the recipient is, has led to great efficiencies in the systems. It also provides feedback on training needs where the gaps have been noted.

## Simplified Procurement Auditing

The system enables tracking of procurement spending or activities which used to be a big issue for the organization. The process was manual and prone to errors at different approval levels. This created challenges in ownership of responsibility for actions. But with, Fraxion now in use, audit trails are available and can't be deleted. It now provides a powerful safeguard in ensuring that all take responsibility at their levels of approvals and also to manage timely decision making.

\*See below an extract of an audit trail generator from Fraxion and also the visibility that we were talking about in our initial point. This captures the time stamp, levels of approval, you can also determine who took the longest time to approve the document.

Timeline					
Timestamp	Employee	Current state	User action	Activity information	User notes
6/5/2023 1:51:55 PM	StephenErecu Okello, sokello@muwrp.org	Approval	Approve	Approved - Escalates: Cost 7,436,090.10 > Threshold 0 / JMEDICC - PO	
6/1/2023 12:26:29 PM	RonaldKasule, rkasule@muwrp.org	Approval	Approve	Approved - Escalates: Cost 7,436,090.10 > Threshold 0 / JMEDICC - PO	
6/1/2023 8:32:42 AM	JoanNshabohurira, jnshabohurira@muwrp.org	Approval	Approve	Approved - Escalates: Cost 7,436,090.10 > Threshold 0 / JMEDICC - PO	
5/30/2023 12:36:23 PM	JoselynKatono, jkatono@muwrp.org	Approval	None	Approvers: Joan Nshabohurira -> Ronald Kasule -> Stephen Erecu Okello -> Rosemary Nakajubi -> Arthur Natwijuka -> Hannah Kibuuka	
5/30/2023 12:36:23 PM	JoselynKatono, jkatono@muwrp.org	Quoting	Submit	Submitted	
5/30/2023 12:24:23 PM	JoselynKatono, jkatono@muwrp.org	Quoting	Save	Updated	
5/30/2023	JoselynKatono,	Quote	Quote	Quoting initialized	

### SCS plans for the next financial year.

One of the areas that are being worked on is the digitization of the contracts management process. MUWRP engages in several service contracts, consultants and sub-grantees that support the different departmental activities and because the volumes have increased overtime in

this area, there is a need to digitize this process for easy management.

SCS is working with the TSS team which has been updated on the needs and requirements. 2023 definitely promises to be an interesting year in as far as automation of SCS services is concerned.

*SCS is working with the TSS team which has been updated on the needs and requirements. 2023 definitely promises to be an interesting year in as far as automation of SCS services is concerned.*



# FINANCIAL YEAR 2022 IN NUMBERS

## 1. MUWRP Sub-grantee Management

Every year, MUWRP as the prime recipient of USG PEPFAR funds provides funding to its partners through a subaward agreement to support the overall objectives of its funded programs.

Each year the MUWRP financial management team ensures that the use of funds aligns with all Federal regulations and statutory requirements, while striving to meet and serve the goals of each program.



Joan Nshabohira handling a session during the Sub-grantee Financial Technical Support training

In FY22, the MUWRP financial team put in place rigorous systematic financial controls and oversight mechanisms to ensure that;

- (i) Project financial information shared with MUWRP is reliable
- (ii) Reported expenses are eligible for funding and
- (iii) The grant budget is implemented and managed in compliance with the sub award agreement

Financial oversight included periodic reviews of internal controls, expense verifications and monitoring visits to partner offices and sites.

Trainings were also provided to strengthen knowledge, skills and abilities to aid smooth and effective financial management and reporting capacities. This was in order to ensure sufficient partners' capacity to manage sub-awards.

### The training particularly included:

1. An overview of the general funding principles applicable to MUWRP grants

2. The guidance on the preparation and management of grant budgets,
3. The submission and review of periodic grant financial reports,
4. The modalities and issuance of cash disbursements and;
5. The financial audit requirements

*Each year the MUWRP financial management team ensures that the use of funds aligns with all Federal regulations and statutory requirements, while striving to meet and serve the goals of each program.*

## 2. Changes in PEPFAR Funding Mechanism

In FY22, PEPFAR funding mechanism, contributed more than 70% of the MUWRP funding portfolio. It was formerly received through Henry M Jackson Foundation (HJF) as Pass through Entity (PTE). This has now changed to direct federal funding through US Army Medical Research Acquisition Activity (USAMRAA), a federal agency, under Cooperative Agreement number W81XWH2120043. As a result, procedural compliance changes were required in the manner of reporting, invoicing and receipt of funds as well as Audit Reporting requirements like Single Audit. However, it also presented an opportunity to negotiate an indirect cost rate, the NICRA.

## 3. Establishment of Negotiated Indirect Cost Rate Agreement (NICRA)

The NICRA establishes the indirect rates an entity may use on proposals for work with the US Federal Government. Once established with one agency, this NICRA is accepted across all other agencies within the Federal Government. In FY22, Makerere University Walter Reed Project Limited (MUWRP) negotiated its first ever indirect cost rate of 14.19% as allowed under the Uniform Guidance and as stipulated in Modification Number P0004 dated August 10, 2022 of the Cooperative Agreement (W81XWH2120043) signed on the 24th September 2021.

## 4. New PEPFAR Annual Expenditure Reporting Requirements for Sub-grantees.

The United States Government (USG) requires an annual report of expenditures of PEPFAR programs at the end of each fiscal year (1 October–30 September). The purpose of expenditure reporting is to provide resource monitoring to better understand the costs the USG incurs to provide a broad range of HIV services and support, and to subsequently use this information to inform program planning through program performance assessments using financial data drawn from expenditure reporting.

For the first time, effective FY2022, expenditure reporting requires expenditures to be collected from sub recipients with annual expenditures greater than \$25,000. This enables full visibility into PEPFAR expenditures made by both prime partner recipients and sub recipients of PEPFAR funding.

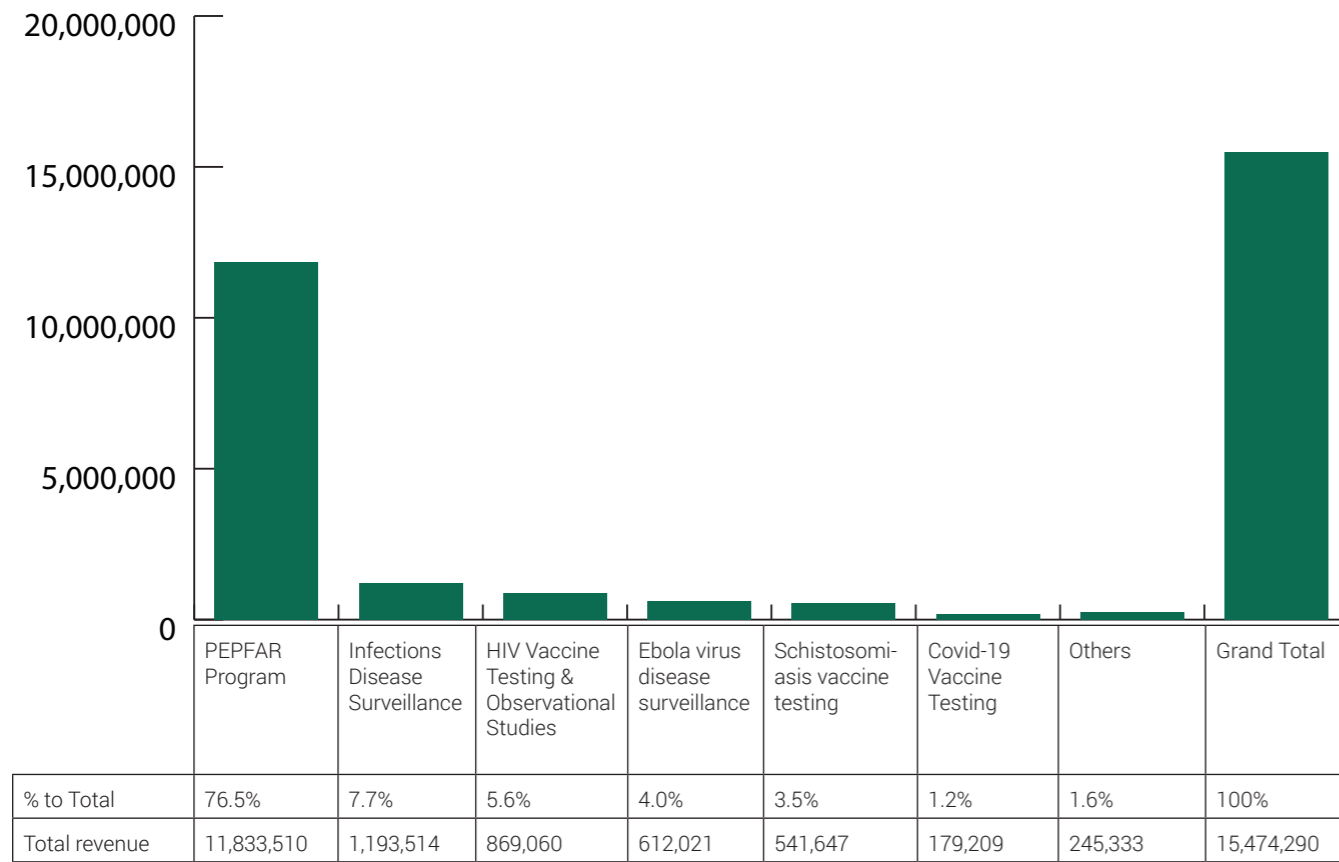
*In FY22, PEPFAR funding mechanism, contributed more than 70% of the MUWRP funding portfolio.*

Through its extensive knowledge and familiarity with the process of PEPFAR annual reporting, the MUWRP Finance team provided training and a series of support to its sub recipients in the following areas:

1. An overview of the new subrecipient reporting requirements, including compliance with federal cost regulations, as outlined in Part 200, Subpart E of the Code of Federal Regulations. This section of the CFR describes cost principles for non-federal entities receiving federal awards, including cost principles related to the classification of direct and indirect costs, the allowability, reasonability and allocability of costs, as well as other cost principles.
2. Best practices in preparation for the PEPFAR annual expenditure reporting processes
3. How to gather expenditure data and complete expenditure reporting template as well as to verify that templates are complete and Error-free
4. Annual expenditure data collection, analysis and populating the expenditure reporting template
5. Categorizing and allocating expenditures, a structure by which funding for PEPFAR activities and services are uniformly organized, clearly identified, and easily accounted for reporting purposes

## 5. FY22 Financial Highlights

### FY22 Total Revenue by Technical Area



In FY 2021/2022, MUWRP's recorded Actual costs incurred were US\$ 14.94 million against a revenue base of US\$ 15.47. This represented a surplus of US\$ 0.535 million.



Finance analysts Ernest and Margaret at work

The figures below are the Statement of Financial Position. They detail the net assets (the difference between total assets and total liabilities) of the MUWRP. This statement provides information about the financial strength of the Organization, and the resources which are available to support its future objectives

### STATEMENT OF FINANCIAL POSITION

	Notes	Actual 2022 (USD)	Actual 2021 (USD)
<b>ASSETS</b>			
<b>Fixed Assets</b>			
Leasehold & Buildings	7.6	1,597,220	1,722,508
		<b>1,597,220</b>	<b>1,722,508</b>
<b>Current Assets</b>			
Cash at bank and in hand	7.4	468,088	1,232,808
Receivables	7.5	2,322,916	3,333,175
		<b>2,791,004</b>	<b>4,565,983</b>
<b>TOTAL ASSETS</b>		<b>4,388,224</b>	<b>6,288,491</b>
<b>FUND BALANCE AND LIABILITIES</b>			
<b>Fund balance</b>			
Accumulated Funds	7.11	724,952	155,503
		<b>724,952</b>	<b>155,503</b>
<b>Non-Current liabilities</b>			
Provision for Severance Costs	7.7 (a)	978,262	846,645
Finance Lease & Payable	7.8	1,721,615	3,200,000
		<b>2,699,877</b>	<b>5,037,809</b>
<b>Current Liabilities</b>			
Accrued expenses and other Payables	7.7 (b)	963,395	1,095,179
		<b>963,395</b>	<b>1,095,179</b>
<b>TOTAL FUND BALANCE AND LIABILITIES</b>		<b>4,388,244</b>	<b>6,288,491</b>

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