

Mount Kenya



University

COLLEGE OF GRADUATE STUDIES AND RESEARCH



2024 RESEARCH BULLETIN

Table OF CONTENTS

| | |
|---|-----|
| Message from the Vice-Chancellor..... | i |
| Deputy Vice-Chancellor's Message..... | iii |
| 1. Introduction to MKU Research Initiatives..... | v |
| 2. Faculty and Researchers Spotlight..... | 3 |
| 3. Student Research Achievements..... | 13 |
| 4. Introduction to MKU Research Initiatives..... | 18 |
| 5. Featured Research Projects..... | 26 |
| 6. Collaborative Research Partnerships..... | 30 |
| 7. Research Infrastructure and Facilities Update..... | 37 |
| 8. Recent and Upcoming Research Events and Conferences..... | 40 |
| 9. Impact of Research on Community and Industry..... | 48 |
| 10. Future Research Directions..... | 50 |
| Funding trends and opportunities..... | 51 |

FROM THE RESEARCH DESK

Message from the Vice-Chancellor

Dear Mount Kenya University Community and Research Partners,

It is with great pride that I present the 2024 MKU Research Bulletin, showcasing the remarkable achievements of our researchers and the significant impact of their work on society.

The past year has been extraordinary for our university's research endeavors. We have witnessed unprecedented growth in research output, with our faculty and students publishing groundbreaking studies in prestigious journals across multiple disciplines. Our researchers have demonstrated exceptional commitment to addressing pressing challenges, particularly in the realm of global health, where MKU has established itself as a center of excellence in malaria research and other infectious diseases.

I am particularly pleased with the successful implementation of our Research and Innovation Week in October 2024. This event exemplified our commitment to fostering a culture of innovation and creativity among our students and staff. The exceptional projects presented during the Hackathon and the engaging discussions across various schools demonstrated the depth of talent and intellectual curiosity within our community.

Our research endeavors continue to be guided by our mission to contribute meaningfully to societal advancement. By aligning our research priorities with Kenya's Vision 2030 and the Sustainable Development Goals, we ensure that our intellectual contributions have practical applications and tangible impacts on communities locally and globally.

The expansion of our research infrastructure and the strengthening of our collaborative partnerships have been instrumental in our success. We have forged valuable alliances with industry leaders, government agencies, and international research institutions, creating opportunities for knowledge exchange and resource sharing that benefit our entire research ecosystem.

As we look to the future, we remain committed to nurturing the next generation of researchers. Our investment in student research initiatives, mentorship programs, and enhanced research facilities reflects our belief that today's students are tomorrow's innovators and problem-solvers.

I extend my heartfelt gratitude to our dedicated faculty, research staff, and students whose tireless efforts and intellectual contributions have elevated MKU's research profile. I also thank our partners and stakeholders whose support has been invaluable in advancing our research agenda.

This bulletin serves not only as a documentation of our achievements but also as an invitation to engage with our research community. I encourage you to explore the fascinating projects and innovations detailed in these pages and to consider how you might contribute to or benefit from our growing research ecosystem.

Together, we will continue to push the boundaries of knowledge, tackle complex challenges, and create a brighter future through research and innovation.

Prof. Deogratius Jaganyi
Vice-Chancellor
Mount Kenya University

Deputy Vice-Chancellor's Message

In the dynamic landscape of modern higher education, Mount Kenya University (MKU) stands resolute in its commitment to research as a cornerstone of academic excellence. Building upon the strong foundation of 2023, we are thrilled to present the 2024 research bulletin, showcasing the remarkable strides made by our faculty and students in pushing the boundaries of knowledge.

This year, MKU has placed a significant emphasis on fostering **innovative approaches** to research, encouraging our scholars to explore uncharted territories and adopt cutting-edge methodologies. We recognize that groundbreaking discoveries often arise from unconventional perspectives and a willingness to challenge established paradigms. This bulletin reflects this spirit, highlighting projects that employ novel techniques and interdisciplinary frameworks to address complex societal challenges.

A key focus for 2024 has been the promotion of **multidisciplinary collaboration**. We understand that the intricate problems facing our world cannot be solved within the confines of a single discipline. By fostering partnerships across diverse fields, we are creating a synergistic environment where researchers can leverage their unique expertise to generate holistic and impactful solutions. You will find within these pages examples of projects that seamlessly integrate insights from the sciences, humanities, technology, and social sciences.

Our commitment to research extends beyond mere academic pursuit; it is about driving tangible change. In 2024, MKU has strengthened its alignment with national and international development goals, ensuring that our research directly contributes to the realization of Kenya's Vision 2030, the AU Agenda 2063, and the global Sustainable Development Goals. This dedication is reflected in the diverse range of projects featured in this bulletin, which address critical issues such as healthcare, environmental sustainability, technological advancement, and socio-economic development.

To further empower our researchers, MKU has continued to enhance its support mechanisms, including the Vice-Chancellor's Research and Innovation Grant. The allocation of significant funds underscores our unwavering commitment to providing the resources necessary for our scholars to excel. We have also refined our capacity-building initiatives, ensuring that our faculty and students are equipped with the latest research skills and knowledge.

As we look ahead, we remain dedicated to fostering a vibrant research ecosystem that thrives on curiosity, collaboration, and innovation. We believe that by nurturing a culture of intellectual exploration, we can empower our researchers to make transformative contributions that will shape a brighter future for Kenya and the world.

Dr. Mercyline Kamande
Deputy Vice-Chancellor, ARA
Mount Kenya University

1.

Introduction to MKU Research Initiatives

Mount Kenya University (MKU), established in May 2008 as a non-profit institution, has emerged as a premier private university with a strong emphasis on science and technology programs. Recognizing that research and innovation serve as cornerstones of socioeconomic advancement, MKU formalized its commitment by establishing a dedicated College of Graduate Studies and Research to drive its expanding research agenda.

The university's research philosophy is anchored in the belief that systematic exploration and validation of novel ideas open new frontiers of knowledge with practical applications for society. This commitment is codified in comprehensive policy frameworks including the MKU Research Policy, Enterprise and Linkages Policy, and Intellectual Property Rights Policy—all designed to create an ecosystem where innovative thinking flourishes.

To transform policy into action, MKU has implemented tangible funding mechanisms such as the Internal Research Grant (Vice-Chancellor's Grant), which provides critical financial support to promising researchers and innovators across disciplines. This investment reflects the institution's understanding that meaningful research requires both intellectual freedom and adequate resources.

Research at MKU is deliberately aligned with broader development objectives, particularly Kenya's Vision 2030 and the Sustainable Development Goals. This strategic alignment ensures that research outcomes address real-world challenges while contributing to national and regional advancement priorities. By focusing on applicable research with clear pathways to implementation, MKU maximizes the impact of its intellectual output.

The university fosters a collaborative research environment where faculty and students engage in cross-disciplinary investigations that challenge conventional boundaries. This approach recognizes that today's complex problems require multifaceted solutions drawing from diverse expertise. MKU's research initiatives span traditional academic disciplines while encouraging innovative intersections between fields.

As a forward-looking institution, MKU continues to expand its research capabilities through strategic partnerships with industry, government agencies, and international

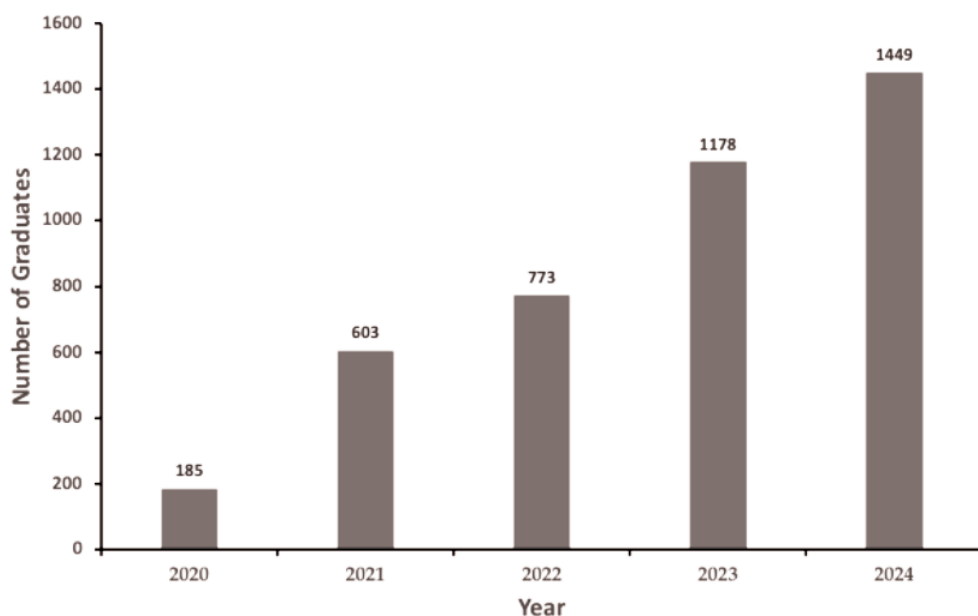
research organizations. These collaborations enhance the university's research capacity while creating opportunities for knowledge exchange and resource sharing. They also provide valuable real-world contexts for testing and refining research outcomes.

Through its comprehensive approach to research development, MKU is positioning itself as a knowledge hub that contributes meaningfully to addressing local challenges while participating in the global research community.

Dr. Henry Yatich
Principal, CGSR
Mount Kenya University

GRADUATION TREND 2020-2024

- ❖ Graduate Studies had been at the forefront of pushing for research at MKU
- ❖ At the time of Covid-19 pandemic, the University approved the postgraduate presentation via web technologies guidelines which allow students to present their research proposals, theses and projects online. This has been a game changer since majority of our students are in the diaspora and are therefore able to continue with their programmes at the comfort of their residences or working space.
- ❖ In 2023, the University intensified efforts to fast track the progression of postgraduate student by implementing a semester unit loading structure that specifies course units and postgraduate milestone students must complete each semester. For example, a master student is expected to complete the programme in 4 semesters. The Graduate Studies Centre of Excellence whose offices are located in Union Towers (4th floor) Nairobi Campus, monitors the academic progression of postgraduate students from enrolment to graduation by maintaining constant contact with both students and supervisors.



- ❖ This has yielded fruits as evidenced by the increasing number of our graduates during the period 2020 – 2024. In the year 2020 due to the Covid-19 pandemic our graduates were the lowest (185) but since the implementation of strategies to fast track our student, a steady increase in the number of graduates has been witnessed as evidenced in the graphical figure above.

Recent awards and recognitions

Dr. Allan Mweke Spearheads Sustainable Agriculture Initiatives

Dr. Allan Mweke, from MKU's School of Pure and Applied Sciences at Nakuru campus, has secured two significant grant projects in 2024, marking a major stride in sustainable agriculture research. The projects, launched in Tanzania, demonstrate MKU's commitment to addressing critical food security challenges in sub-Saharan Africa. The first project, AgBio4SSA, funded by NRF Kenya and FORMAS, focuses on advancing and adapting agricultural biologicals for smallholder farmers. With a Ksh 30 million budget, MKU, as the technical lead in Kenya, will collaborate with the University of Nairobi, alongside partners in Sweden, Tanzania, and South Africa. This initiative aims to establish best practice protocols for biologicals testing, specifically targeting the tomato leafminer.



The second project, INSALSA, supported by Biodiversa+, emphasizes enhancing agriobiologicals sustainability through living labs. With a substantial Ksh 68 million grant, this consortium project involves partners from multiple European and African countries. MKU will play a key role in establishing living labs to foster knowledge co-creation and test biologicals and soil amendments. Both projects, spanning three years, will significantly contribute to promoting eco-friendly pest management and sustainable food systems.

Profiles of distinguished researchers

In 2024, our faculty and researchers continued to drive innovation and discovery. We are proud to present profiles of distinguished individuals who have made significant contributions this year, showcasing their expertise and dedication.



Prof. Jesse Gitaka

Prof. Jesse Gitaka is a Physician Scientist, and Principal Investigator at Mount Kenya University, as well as a Visiting Associate Professor at the Institute of Tropical Medicine, Nagasaki University, Japan. He continues to make significant contributions to global health through his research and innovation, focusing primarily on infectious diseases, maternal health, and antimicrobial resistance. His work is centered on developing reliable point-of-care diagnostic assays for resource-limited settings, employing advanced technologies such as isothermal nucleic acid analysis and smartphone readouts.

Additionally, he is actively engaged in crucial research on the molecular epidemiology of diseases like malaria and tuberculosis, including drug resistance surveillance.

Key Research Achievements

(A) Point-of-Care Diagnostic Innovations

Prof. Gitaka has been at the forefront of developing rapid and reliable diagnostic tools for infectious diseases, particularly for malaria and sexually transmitted infections. By leveraging genome mining techniques, his team has enhanced the sensitivity of molecular assays, improving early disease detection in low-resource settings.

(B) Cervical Cancer Screening and Barriers to Early Detection

Prof. Gitaka led a comprehensive survey across private health facilities in Kenya to assess cervical cancer screening services. The study identified critical barriers such as staffing shortages, lack of patient awareness, financial constraints, and cultural factors. He emphasized the necessity of understanding existing healthcare contexts before implementing interventions, advocating for the integration of diagnosis with treatment to encourage patient participation.

(C)Advancements in Maternal and Newborn Health

In the realm of maternal health, Prof. Gitaka's research on placental malaria provided new insights into the molecular mechanisms affecting placental function during infection. His team's histopathological analyses and biomarker discovery revealed an association between placental malaria and a TLR-Endothelin-3-oxidative damage response in human placenta tissues. These findings have significant implications for improving maternal and newborn health outcomes.

(D)Tackling Antimicrobial Resistance (AMR)

Addressing the global threat of AMR, Prof. Gitaka's team employed genomic sequencing and advanced bioinformatics analyses to identify resistance genes and monitor their evolution within microbial populations. Their research uncovered a high abundance of AMR genes in hospital wastewater, underscoring the need for robust antimicrobial stewardship programs.

(E)AI Integration in Healthcare

A pioneer in applying artificial intelligence to healthcare, Prof. Gitaka is exploring the use of AI-driven diagnostic tools, including the development of a GPT-4 AI model to support healthcare providers. This initiative aims to enhance decision-making and improve healthcare accessibility, particularly in underserved communities.

(F)Malaria Prevention Strategies

Prof. Gitaka co-authored a study evaluating the protective efficacy of OlysetPlus ceiling nets in reducing malaria incidence among children in Homa Bay County, Kenya. This cluster-randomized controlled study aims to provide evidence for innovative malaria prevention strategies that could be scaled up nationally.

(G)Commitment to Translational Research

As a Senior Lecturer and founding Director of the Centre for Malaria Elimination, Dr. Gitaka remains dedicated to translating research into practical solutions that improve healthcare outcomes. His affiliations with prestigious institutions reinforce his commitment to addressing pressing health challenges and ensuring equitable healthcare access, particularly for underserved populations. Through his research and leadership in 2024, Dr. Jesse Gitaka continues to shape the future of global health, driving innovative solutions to combat infectious diseases, strengthen healthcare systems, and enhance the well-being of vulnerable communities



Dr. Bernard Kanoi

Dr. Bernard Kanoi, a Biomedical Scientist and EDCTP Fellow at Mount Kenya University's CME, is a leading figure in immunology research with over 70 peer-reviewed publications. His work consistently focuses on understanding acquired immunity against infectious diseases, primarily malaria, employing high-throughput immuno-profiling and reverse vaccinology.

Dr. Kanoi's recent research has significantly advanced the identification of novel malaria vaccine candidates, particularly targeting antigens associated with protection in vulnerable groups like children and pregnant women. His studies have explored immune responses to various *Plasmodium falciparum* proteins, including those involved in erythrocyte invasion and those associated with reduced clinical malaria risk. He has also investigated conserved B-cell epitopes across malaria species using bioinformatics, and explored antibody repertoires against key parasite antigens in exposed populations. This work provides critical insights into host-pathogen interactions and the mechanisms of immune memory crucial for long-term protection.

Expanding his expertise, Dr. Kanoi's recent publications also address the immunology of COVID-19 and tuberculosis. His contributions include work on developing rapid diagnostic tests for SARS-CoV-2 and exploring the landscape of COVID-19 vaccinology in Africa. Furthermore, he has been involved in studies on schistosomiasis and sexually transmitted infections, focusing on developing sensitive molecular diagnostic tools. Dr. Kanoi's leadership within the CME fosters crucial international collaborations with Ehime University, Alberta university, Nagasaki University, Harvard University, among many others. His impactful research not only pushes the boundaries of scientific discovery but also informs policy discussions on infectious disease (such as malaria) control and vaccine development, solidifying his vital role in global health efforts. His dedication continues to inspire the next generation of researchers.



Dr. Ernest Wandera

Dr. Ernest Wandera, an EDCTP Fellow at Mount Kenya University and Senior Research Scientist at KEMRI, continues to make significant strides in vaccine and diagnostic development. With over 12 years of experience and a Ph.D. in Medical Science from Nagasaki University, his expertise spans pathogen point-of-care diagnostics, rotavirus vaccine research, enteric virus epidemiology, and genomic surveillance of infectious diseases.

Dr. Wandera has led groundbreaking work in the development and validation of novel point-of-care diagnostic devices, improving accessibility and efficiency in the detection of viral and bacterial infections. His research on rotavirus has provided critical insights into vaccine efficacy in different population groups, contributing to global efforts to enhance immunization strategies against diarrheal diseases.

Dr. Wandera has also been instrumental in advancing whole genome sequencing-based surveillance, enabling more precise tracking of viral evolution and antimicrobial resistance patterns. His work in enteric virus epidemiology has helped shape public health policies by identifying emerging threats and assessing the impact of vaccination programs.

Beyond research, Dr. Wandera has continued to build research capacity by training scientists in Biosafety Level III (BSL-3) research, ensuring that the next generation of African researchers is equipped to handle high-containment pathogen studies safely and effectively. His mentorship and extensive contributions to peer-reviewed publications underscore his dedication to fostering scientific excellence and knowledge dissemination. Dr. Wandera remains committed to driving innovation in infectious disease control, bridging the gap between laboratory discoveries and real-world applications to improve global health outcomes.



Dr. Francis Kobia

Dr. Francis Kobia, a distinguished Postdoctoral Fellow with expertise in cell and molecular biology, continues to make groundbreaking contributions to understanding the molecular mechanisms of fetal-maternal innate immune conflict during human placental malaria. With a PhD in Molecular Medicine from the European School of Molecular Medicine/University of Milan and extensive postdoctoral research experience at Cincinnati Children's Hospital and the University of Milan, Dr. Kobia remains at the forefront of malaria immunopathology research.

Dr. Kobia's research has yielded key insights into the immune interactions within the placenta, shedding light on how *Plasmodium falciparum* infections disrupt fetal-maternal immune balance. His ongoing work, funded by the EDCTP2 program and Novartis Global Health, has focused on identifying potential targets for pharmacologic modulation to mitigate the adverse effects of placental malaria. Through innovative molecular profiling techniques, his studies have provided new perspectives on immune evasion strategies employed by the malaria parasite and the subsequent inflammatory responses that contribute to poor pregnancy outcomes.

A major milestone this year has been his development of novel in vitro models that accurately simulate placental malaria conditions, enabling more precise testing of potential therapeutic interventions. His research has also deepened the understanding of placental immune tolerance, with implications beyond malaria, potentially informing broader maternal-fetal health research.

Dr. Kobia remains dedicated to translating his discoveries into tangible clinical applications, bridging the gap between molecular research and real-world health solutions for vulnerable populations.



Dr. Samuel Mungai

Dr. Samuel Mungai Mbugua, a public health specialist and implementation scientist, has significantly advanced the field of epidemiology and public health interventions. As a HIGH IRI Fellow at the University of Washington and a Postdoctoral Fellow at Moi University, his work focuses on translating research into practical interventions to improve public health outcomes. His expertise encompasses maternal and newborn health, non-communicable diseases, and infectious diseases of poverty.

Dr. Mbugua co-authored a study titled "Evaluation of the protective efficacy of OlysetPlus ceiling nets for reduction of malaria incidence in children in Homa Bay County, Kenya: a cluster-randomised controlled study protocol," published in January 2025. Additionally, he contributed to research on the management of possible severe bacterial infections in young infants, emphasizing the importance of timely diagnosis and treatment using suitable antibiotics to prevent newborn and young infant mortality.

Dr. Mbugua's dedication to addressing health inequalities is evident through his collaborative efforts and academic roles. His commitment to evidence-based interventions and mentorship of upcoming public health researchers continues to shape public health strategies that address critical health challenges and improve population health outcomes.



Dr. Rachael Kimani

Dr. Rachael Kimani, a researcher at Mount Kenya University's Department of Research and Innovation, has made significant contributions to medical microbiology and public health in 2024. Her work has focused on antimicrobial resistance, infectious disease diagnostics, and healthcare policy, addressing critical challenges in Kenya's healthcare system.

My research areas span from antimicrobial resistance to molecular diagnostics, and public health. In the past few years, I focused on evaluating antibiotic use & resistance in Kenya whereby our team detected multidrug-resistant organisms in a referral hospital (2024). Important findings included reports on the presence of resistant pathogens like *Stenotrophomonas maltophilia* and *Burkholderia cepacia*. The findings from the study supported surveillance and infection control efforts at the local hospital. In addition, the findings addressed the public health burden of AMR and potential interventions.

Earlier on I focused on new diagnostic techniques that integrated filtration and molecular detection, streamlining diagnosis of diseases such as COVID 19 and *S. agalactiae*. We showed proof of concept of a portable, bioluminescence-based diagnostic method for *Streptococcus agalactiae* (GBS). This assessed a practical challenge in real-world settings. It is relevant for discussions on emerging diagnostic platforms in low-resource settings.

On molecular diagnostics, I have focused on application of molecular techniques for rapid pathogen identification and utilization of Nanopore sequencing to track AMR genes, mobile genetic elements, and virulence factors.



Dr Racheal Kimani presenting her research findings at KEMRI's 2025 KASH conference held at Safari Park.



Dr. Clement Shiluli

Dr. Clement Shiluli is currently a postdoctoral research scientist at the Directorate of Research, College of Graduate Studies and Research of the Mount Kenya University (MKU). Since joining the CRID in 2021, Dr. Shiluli has pioneered research on point of care diagnostics for various infectious diseases. These include curable sexually transmitted infections, Schistosomiasis, Malaria, Leishmaniasis, Tuberculosis and HIV. Findings from his research at the CRID has positively impacted the design and development of

point of care diagnostics in resource limited settings. In addition, he has played a critical role in providing mentorship and supervision to more than 10 postgraduate and undergraduate scholars at the CRID who are undertaking various research projects. Before joining the CRID, Dr. Shiluli was the Head of the Microbiology Department of the School of Medicine of UZIMA University. Dr. Shiluli has also worked with the Kenya Medical Research Institute Malaria and Tuberculosis research laboratories where he has contributed significantly to efforts towards eradicating infectious diseases in Kenya.



COMMUNITY ENGAGEMENTS:

In February 2025, Dr. Shiluli was a guest speaker in a save the sicklers Mount Kenya University chapter launch that was held at the Alumni plaza at the main campus. The main focus of the function was to raise awareness, drive advocacy, and support individuals living with sickle cell disease. The event brought together key stakeholders in the country involved in sickle cell advocacy and numerous charity organizations.

INTERNATIONAL CONFERENCES:

Dr. Shiluli was a recipient of the 2024 TB Union travel award that enabled him present findings from his research studies at the CRID on point of care diagnostics for pulmonary Tuberculosis. The conference was held in Bali, Indonesia and more than 1000 delegates with various expertise in Tuberculosis research were in attendance, including PIs in an ongoing MKU, KEMRI and UCSF TB study. During the conference, Dr. Shiluli established collaborative networks with scientists based at the African Health Research Institute in Durban, Republic of South Africa and the Bioneer Company based in South Korea.



Dr. Clement Shiluli (MKU, CME) at the TB HIV keystone symposium in Durban, SA., 2025

3.

Student Research Achievements

Postgraduate research highlights



Samuel Irungu, Lucy Mwai and Dr. Rachael Kimani, members of the Gitaka Lab, present at the KASH Conference 2025 held at the Safari Park Hotel.

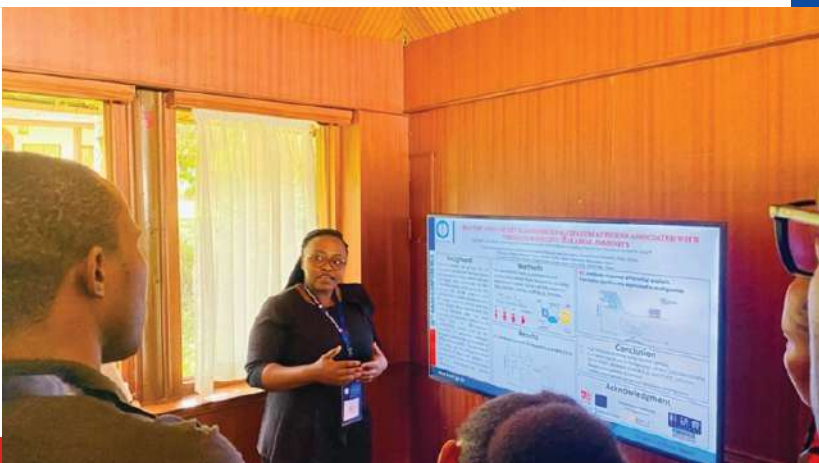


Figure 3 Lucy Mwai, Phd candidate presenting her poster on Identification of key plasmodium falciparum antigens associated with pregnancy-specific malaria immunity At KASH 15 Conference 2025



Dr. Rachael Kimani, accompanied by her supervisors, walking to the podium to receive her PhD certificate at the 26th Mount Kenya University (MKU) Graduation, 2024



Dr. Samuel Mungai and Patrick Wakaba, a postgraduate scholar studying for his master's degree in Japan, present at the Health Systems Research Global Symposium 2024 held in Japan.



Samuel Mbugua, Lab Manager at the Center for Malaria Elimination, delivered an oral presentation at the World AMR Awareness (WAAW) Conference 2024



Patrick Ndinguri, a PhD student, presenting at the KEMRI Center for Virus Research Annual Symposium, 2024



Harrison Waweru, a PhD student making an oral presentation at the Multilateral Initiative on Malaria (MIM) 8th Pan-African Malaria Conference in Kigali, Rwanda, 2024

Research scholarships and awards received

Two MKU Student Innovators Shine at the 2024 AYuTe Africa Challenge

Nanaheal Enterprises, an agritech startup founded by Mount Kenya University students Esbon Ogetto and Bettinah Maruti, has garnered widespread recognition after emerging as one of the winners of the 2024 AYuTe Africa Challenge. The prestigious event, held during the Kenya Innovation Week in Nairobi, was organized by Heifer International to spotlight transformative innovations in agriculture.



Esbon Ogetto and Bettinah Maruti receiving their award of \$3,800 at the 2024 Ayute Africa Challenge



Nanaheals Enterprises presenting their innovative solution to President William Ruto during the opening ceremony of the Kenya Innovation Week at the Edge Convention Centre in Nairobi

The competition drew an impressive 308 applicants, with 58 innovators advancing to the regional stage. After a rigorous selection process, the top 10 finalists were chosen to participate in a month-long incubation program provided by the E4 Impact Entrepreneurship Centre. This incubation offered vital resources, including mentorship, training, and networking opportunities designed to help these startups scale their solutions.

Nanaheal Enterprises, which has developed a unique process to repurpose pineapple waste into carbon-negative fertilizer, stood out for its contribution to both sustainable agriculture and waste management. The innovation addresses critical challenges related to climate change, soil degradation, and the environmental impact of agricultural waste. By turning pineapple waste into a valuable agricultural resource, Nanaheal is not only enhancing soil health but also promoting farmer productivity.

As the second runners-up in the competition, Nanaheal Enterprises was awarded a \$3,800 prize and had the honor of presenting their innovative solution to President William Ruto during the opening ceremony of the Kenya Innovation Week at the Edge Convention Centre in Nairobi.

In addition to the competition's rewards, the start-up is currently part of the SKIES Business Incubation Program, a World Bank-funded initiative implemented by Mount Kenya University's Innovation and Incubation Centre. This program further supports their growth and provides them with the resources necessary to refine their business model and scale up their impact.

Donatus Njoroge, the Head of Innovations, Intellectual Property, and Community Engagement at the University, expressed his pride in their success, stating, "Their innovation aligns with global efforts to combat climate change while enhancing soil health and farmer productivity. We will continue to help them refine their business model on the path to scale."

Nanaheal Enterprises' success underscores the immense potential of Mount Kenya University students innovators in leading the way in agritech and environmental sustainability.

Ongoing funded projects

Mount Kenya University Leads Landmark DAAD-Funded Project: Empowering Kenyan Entrepreneurs Through Collaborative Innovation

Mount Kenya University (MKU) is proud to announce its leadership in a groundbreaking collaborative project, securing funding under Phase 2 of the DAAD Project Implementation and Transfer Strategy (2025-2029). In partnership with the University of Leipzig and the ACCESS consortia, MKU will spearhead an initiative involving ten leading Kenyan universities, aimed at revolutionizing entrepreneurship education and service-learning.

This ambitious project, titled "ACCESS," will foster a dynamic ecosystem of innovation, directly benefiting staff and students through funded joint activities with focused support from industry. The participating universities, including Daystar University, Kabarak University, Karatina University, KCA University, Kenyatta University, Machakos University, Riara University, Strathmore University, Technical University of Kenya, and Zetech University, will work together to achieve transformative outcomes.

Key Funded Activities (2025-2029):

- ❖ **Development of a Joint National Competence-Based Entrepreneurship Curriculum:** This pivotal activity will see experts from all participating universities collaborate to create a cutting-edge curriculum. This program will feature capstone assignments, self-paced learning modules integrated into each university's Virtual Learning Management System (VLMS), and an AI-powered monitoring tool to track learning progress, ensuring a personalized and effective learning experience.
- ❖ **Integration of Problem-Based Service-Learning (SL) in MBA Programs:** Recognizing the importance of practical application, the project will integrate Problem-Based Service-Learning into MBA programs. Universities will collaborate to develop Research Methodology SL Modules and Unit Specialization SL Modules, enabling students to engage in real-world research projects with local SMEs, acting as consultants while completing their research.
- ❖ **Establishment of Student ACCESS Business Ideas Clubs:** To cultivate entrepreneurial spirit, each university will establish Student ACCESS Business Ideas Clubs. Annually, two top students from each institution will be selected to participate in a five-day business bootcamp. These bootcamps, facilitated by industry experts and innovation hub professionals, will provide invaluable technical advice and networking opportunities. Additionally, MKU is currently finalizing a collaborative agreement

with Enrich Africa, leveraging its EU-AU network, and continuing its strong partnership with ACCESS SEPT at Leipzig University, to further support student-based business ideas.

"This collaboration marks a significant milestone in fostering entrepreneurial skills, industry engagement, and service-learning integration across Kenyan universities," stated Dr. Henry Yatich, Ph.D, ACCESS Project Coordinator (2025-2029) and Principal, College of Graduate Studies and Research, Mount Kenya University. "We are committed to creating a vibrant platform for innovation and empowering the next generation of Kenyan entrepreneurs."



This initiative underscores MKU's dedication to driving positive change through collaborative and innovative approaches, aligning with our broader research and academic goals. Stay tuned for further updates as this transformative project unfolds.

Updates on Coordination for VC's Research & Innovation Grant Award Event SEADE Award, Cape Town South Africa:





November 2024, the ACCESS Project Team received a prestigious award from SEADE, South Africa, in recognition of its outstanding contribution to enhancing employability and university-industry collaboration across Africa. The award was received on behalf of the team by Dr. Henry Yatich, the Country Project Coordinator for Kenya. He later presented it to the Principal Investigator, Prof. Dr. Utz Dornberger, at Leipzig University, Germany. This milestone highlights the project's growing impact in shaping future-ready graduates through innovative service-learning and skills development initiatives

ACCESS Conference Tunis:



From October 1st to 5th, 2024, Mount Kenya University (MKU) staff and Ph.D. students participated in the ACCESS Conference held in Tunis, Tunisia. The conference brought together stakeholders from academia, industry, and government to explore innovative pedagogies and collaborative strategies aimed at strengthening graduate competitiveness across Sub-Saharan Africa. MKU's active participation reflects its ongoing commitment to enhancing employability, knowledge transfer, and university-industry linkages through the ACCESS project.

ACCESS UBL-Stakeholder Meeting:



In November 2024, the ACCESS Project Kenya team hosted a high-level breakfast meeting aimed at promoting service-learning as a key strategy for enhancing graduate employability in Kenya. The event brought together academic leaders, industry partners, and policymakers to discuss the integration of service-learning into higher education curricula. ACCESS Kenya is spearheaded by Dr. Henry Yatich, Country Coordinator, and Prof. Peter Kirira, a member of the ACCESS Board, both of whom are championing efforts to bridge the gap between academia and industry through innovative, community-engaged learning.

RIW2024:



Participants during the Mount Kenya University (MKU) Annual Research and Innovation Week held in October 2024. The event served as a vibrant platform for collaboration, bringing together stakeholders from Higher Education Institutions, TVETs, industry, regulatory bodies, government agencies, NGOs, innovation hubs, international partners, and individual innovators. The week showcased groundbreaking ideas with the potential to evolve into pioneering products, spin-offs, and new ventures. A key highlight was the promotion of stronger academia-industry linkages through the Service-Learning (SL) initiative. Outstanding student innovators were awarded seed grants to further develop and commercialize their prototypes, reinforcing MKU's commitment to nurturing innovation and entrepreneurial thinking.

CAREED Conference 2024:



The 8th Annual Centre for African Research on Enterprise and Economic Development (CAREED) Conference was co-hosted by the University of the West of Scotland's School of Business and Creative Industries and Mount Kenya University. The conference provided an engaging platform for scholars, practitioners, and policymakers to present and discuss a diverse range of papers focused on enterprise, innovation, and economic development in Africa. The event underscored the importance of cross-continental collaboration in addressing Africa's development challenges through research-driven solutions.

9th IIUCA Conference 2024:



Prof. Deogratius Jaganyi, Vice-Chancellor of Mount Kenya University (MKU) and outgoing Consortium Chairman, officially handed over leadership to Prof. Kate Azuka Omenugha, FNIPR, during the 9th International Interdisciplinary Conference held at Chukwuemeka Odumegwu Ojukwu University (COOU) in Anambra, Nigeria, from 6th to 8th November 2024. Prof. Jaganyi was accompanied by MKU Steering Committee members, Dr. Henry Yatich and Prof. Peter Wanderi. The handover marked a significant milestone in fostering regional academic collaboration and interdisciplinary research across African higher education institutions.

5.

Featured Research Projects

Mount Kenya University (MKU) has established itself as a significant contributor to global health research, with particular emphasis on infectious diseases that affect sub-Saharan Africa. The university's research portfolio demonstrates a comprehensive approach to tackling some of the most pressing health challenges in the region. Here, we highlight several groundbreaking research projects that exemplify MKU's commitment to scientific innovation and public health impact. The projects highlight the university's commitment to addressing critical health challenges through innovative approaches and multidisciplinary collaboration.

Malaria Research: A Multifaceted Approach

A significant portion of MKU-affiliated research centers on malaria, a major public health concern in sub-Saharan Africa. This research encompasses various aspects, including:

✦ Investigating Placental Malaria:

These studies explore the complex immunological and molecular mechanisms underlying placental malaria, a condition that significantly impacts maternal and fetal health in endemic regions. The research has uncovered important associations between placental malaria infection and immune regulation.



Dr. Kobia with Prof Amanda at Cambridge university as part of collaborative effort in studying malaria in pregnancy.

Understanding Immunity and Vaccine Development:



In Feb 2025, vaccine development practitioners, funders, and experts from Kenya, Rwanda, the United States, and across the African continent came together in Kigali, Rwanda, for the Partnerships for Vaccine Development in Africa Workshop funded by gates foundation and to exchange knowledge on the latest advances in vaccine development and explore opportunities for impactful collaborations to drive growth in the sector. Dr Bernard Kanoi (second right) and Prof Gitaka represented Kenya, and MKU.

MKU's flagship research initiative focuses on understanding immune responses to malaria parasites and identifying potential vaccine candidates. Led by immunologists and molecular biologists, the projects have yielded significant insights into protective mechanisms against clinical malaria. For example, Rotich et al. (2025) focused on targeting *Plasmodium falciparum* conserved malaria antigen proteins, for pregnancy-associated malaria vaccine development.

This research stream represents a critical step toward developing effective malaria vaccines, particularly for vulnerable populations in endemic regions.

Drug Resistance and Diagnostics:

In 2024, significant strides were made in malaria research, notably in addressing drug resistance and diagnostic challenges. Studies done revealed the concerning presence of artemisinin resistance-associated K13 mutation C469Y in *Plasmodium falciparum* strains within Western Kenya, underscoring the ongoing threat to current treatment strategies. Further research identified *pfhrp2* and *pfhrp3* gene deletions in asymptomatic infections, highlighting a critical diagnostic challenge for rapid tests. Additionally, investigations into CYP3A4 gene variation in malaria-endemic populations provided valuable insights into how genetic diversity influences drug efficacy.

❖ Intervention and Epidemiology:

Significant progress was achieved in 2024 in the understanding of malaria epidemiology and intervention especially in the Lake Victoria region. In order to identify hard-to-reach population, which is essential for targeted bed net and vaccination distribution, studies used spatial analysis. In order to support evidence-based intervention techniques, researchers assessed the protective effectiveness of OlysetPlus ceiling nets. The non-random distribution of *Plasmodium* species infections and related clinical characteristics in children was also discovered by investigations, offering information on regional illness trends. In addition, a systematic scoping study provided a more comprehensive understanding of the influence of different malaria therapies on endemicity by clarifying their indirect impacts.

❖ Species distribution:

Research significantly advanced our understanding of *Plasmodium* species distribution. A key study provided crucial insights into the spatial patterns of malaria transmission, highlighting the importance of considering localized, ecological and epidemiological factors when designing and implementing malaria control strategies.

Beyond Malaria: Addressing Other Infectious Diseases

MKU's research extends beyond malaria to encompass other significant infectious diseases:



MKU team with collaborators from Harvard University and Mpala Research institute. Together they are studying lions diet- what did the lion eat last night, and may be why?

Industry collaboration



Project Title: Student Training for Entrepreneurial Promotion – Sustainability (STEP-S)

Project Team: Mr Bonface Joel Malala & Prof. Peter Wanderi

Project Period: 2024-2027 (4 Years)

Project Funder: German Academic Exchange Services (DAAD)

Student Training for Entrepreneurial Promotion – Sustainability (STEP-S) is a collaborative project between Leuphana University (Germany), Mount Kenya University (Kenya), University of Venda (South Africa)

and Godfrey Okoye University (Nigeria). The overall aim of the project is to promote entrepreneurship skills among undergraduate and postgraduate students at university level as well secondary school students in order to bridge unemployment challenges through self-employment. The project strongly integrates Sustainable Development Goals (17-SDGs) in its entrepreneurship model.

To date, Mount Kenya University has attained the following milestones; trained and certified 12 STEP-S trainers (ToTs), conducted postgraduate research workshop where over 150 staff and postgraduate students were trained on research skills, trained and certified 122 undergraduate students (MKU, Thika campus) on entrepreneurship skills - seed capital was provided to trainees to enable them practice business within campus. In addition, the project participated in DAAD Leadership Conference in Dar es Salaam where global DAAD funded projects convened for 2-day conference aimed at networking.

In the current year, Mount Kenya University is scheduled to host the second Train-the-Trainer workshop in March 2025 during which addition 12 trainers will be trained and certified and later they will train the second cohort of 200 undergraduate student teachers' on entrepreneurship.



STEP-S (2024 Cohort) Graduates after commissioning/Graduation (March 2025)





Postgraduate research workshop training at MKU (July 2025)

Academic partnerships (local and international)

This year, we established key partnerships with institutions and organizations, strengthening our research impact. These include:

- ❖ **Mpala Research Institute**
- ❖ **Ehime University, Japan**
- ❖ **Karolinska Institute, Sweden**
- ❖ **University of California, San Francisco**
- ❖ **Kenya Medical Research Institute, Kenya**
- ❖ **Sysmex Corporation**

We are actively seeking collaborators and welcome interested researchers to connect. Additionally, funding opportunities are open for our research areas.

CME researchers visit Ehime Prefecture for joint research with Ehime University



Six members, including teachers, researchers, and graduate students, participated in the joint research. The collaboration aimed to establish a Sero diagnostic method capable of detecting asymptomatic infected individuals. By utilizing the center's cell-free protein synthesis technology, the team could easily and quickly test for antibodies that develop in the bodies of malaria patients through antibody measurement and data analysis.

Visiting Students/Researchers

The Center for Malaria Elimination (CME) has continued to attract international trainees, further solidifying its reputation as a center of research excellence and capacity building:

- ❖ **Romy Van Dijk**, a medical student from the Netherlands, joined CME for several months starting in November 2024. Her research focused on antimicrobial resistance in Group B Streptococcus (GBS). During her stay, she gained valuable skills in microbial culture, antimicrobial susceptibility testing, and PCR techniques, contributing to ongoing AMR surveillance efforts and strengthening CME's research output in bacterial resistance.



- ❖ **Rebecca**, a PhD student from the University of Alberta, Canada, spent two weeks between July to August at CME, focusing on microscopy work for ex-vivo placental malaria experiments and honing her skills in advanced microscopy techniques and laboratory procedures.



*Mary Wachira and Rebecca, a
PHD student, on a hike*

Community-based research initiatives

In 2024, the Center for Malaria Elimination (CME) continued to strengthen its field-based research and community engagement efforts in Western Kenya. These collaborative initiatives focus on working closely with local communities, healthcare facilities, and county health authorities to support malaria eradication strategies. Key areas of focus include pregnancy-



associated malaria, where CME is involved in investigating infection rates, treatment adherence, and maternal-child health outcomes. The center also plays a significant role in antimicrobial resistance (AMR) surveillance, monitoring the spread of resistant bacterial strains in both healthcare and community settings. Through routine malaria surveillance activities, the CME team collects data on parasite prevalence, transmission patterns, and vector behavior to inform targeted interventions. These community-based efforts are made possible through partnerships with local leaders, healthcare workers, and international collaborators, with the ultimate goal of translating research findings into tangible public health impact.

Collaborative malaria meetings with nurses and community health workers at Webuye Hospital, Bungoma County. (A malaria in pregnancy research project).



CME researchers and collaborators in the field engaging with the community on the impacts of house-hold ceiling nets, a project being spearheaded by the Centre for Malaria Elimination team, 2025

7.

Research Infrastructure and Facilities Update

New equipment and technologies

In 2024, the Center for Malaria Elimination (CME) at Mount Kenya University achieved significant milestones in upgrading its laboratory infrastructure to support advanced research in infectious diseases and antimicrobial resistance (AMR).

Illumina NextSeq 1000 Acquisition

The center proudly acquired the Illumina NextSeq 1000, the first next-generation sequencer housed at an educational institution in Kenya. This high-throughput sequencing platform positions CME at the forefront of genomic research in East Africa. The sequencer will drive studies in cancer genomics, AMR surveillance, and infectious tropical disease research, reinforcing CME's commitment to transformative, high-impact research and regional collaboration.



Happy scientists: The joy for sequencing the human immune system cells at CME.

Acquisition of the Lonza 4D-Nucleofector System for Electroporation:

The center proudly acquired the Illumina NextSeq 1000, the first next-generation sequencer housed at an educational institution in Kenya. This high-throughput sequencing platform positions CME at the forefront of genomic research in East Africa. The sequencer will drive studies in cancer genomics, AMR surveillance, and infectious tropical disease research, reinforcing CME's commitment to transformative, high-impact research and regional collaboration.



This machine is able to transform any cell to the act the way you want the cell to act.

Establishment of Malaria Parasite Cultures

CME successfully established and maintained in vitro Plasmodium falciparum cultures, providing a critical platform for antimalarial drug screening, parasite biology research, and vaccine candidate testing.

Expansion of Bacterial Strain Libraries for AMR Studies

The center has expanded its library of clinically relevant bacterial isolates, including multidrug-resistant strains, to support research into antimicrobial resistance (AMR). These bacterial lines are being used to test novel antimicrobial compounds, investigate resistance mechanisms, and strengthen local AMR surveillance efforts.

Through these investments in cutting-edge technologies and organism repositories, CME continues to enhance its research infrastructure, positioning itself as a regional leader in infectious disease research, AMR studies, and genomic innovation.

Digital research resources

Mount Kenya University (MKU) offers a variety of digital resources to support its academic community:

✂ **Library Services:** The <https://library.mku.ac.ke/> provides access to an extensive collection of e-resources, including e-books, online journals, and an e-repository. Users can search the online catalogue for available materials and utilize tools like Turnitin for academic integrity. Guides on accessing these resources are also available to assist users.
https://library.mku.ac.ke/?utm_source=chatgpt.com

Virtual Learning Management System (VLMS): The [VLMS platform](#) facilitates digital learning by providing course materials, virtual classrooms, assignment management, and academic collaboration tools. It is designed to enhance the learning experience for both full-time and distance learning students. vlms.mku.ac.ke

Open, Distance and Electronic Learning (ODEL): MKU's [ODEL department](#) offers various digital learning programs across multiple disciplines, enabling students to pursue their studies remotely.

8.

Recent and Upcoming Research Events and Conferences

Recent activities

Throughout the year, the MKU and collaborating research teams participated in significant scientific engagements that promoted knowledge exchange, skill development, and collaborative growth.

MKU Research and Innovation Week

The annual MKU Research and Innovation Week has become a cornerstone event in the university's academic calendar. The most recent edition, held in October 2024, showcased the institution's dedication to promoting research, creativity, and entrepreneurship among students and staff.

This week-long symposium featured diverse activities designed to engage participants across multiple disciplines:

Hackathon: Exploring Technological Frontiers

A highlight of the 2024 Research and Innovation Week was the Hackathon event that brought together tech-enthusiasts to explore advancements in Artificial Intelligence. Participants engaged with cutting-edge topics including:

- ✕ Language models such as ChatGPT and Bard
- ✕ AI-generated imagery using platforms like DALL-E and Mid-Journey
- ✕ Code generation applications for software development
- ✕ Ethical considerations in AI development and deployment

The Hackathon produced remarkable innovations, with team ATG claiming the top prize for developing an AI model enabling users to write and erase with hand gestures in virtual classrooms—eliminating the need for traditional writing tools.

School-Specific Symposia

The 2024 event successfully implemented a decentralized approach by devolving objectives to individual Schools, allowing for more focused and discipline-specific discussions. The School of Education, for example, hosted meaningful dialogues on the impact of the Competency-Based Curriculum on higher education and the importance of inclusive education practices.

Distinguished Speakers

The event featured notable speakers including:

- ✦ Dr. James Njogu, Secretary General of the Kenya National Commission for UNESCO, who emphasized
- ✦ the importance of independent thinking and human-centered innovation.
- ✦ Dr. Cecilia Kimani, who advocated for comprehensive inclusive education approaches.
- ✦ Economics expert Mr. Constant, who highlighted the critical role of sustainable business practices in addressing global challenges.

Awards and Recognition

The closing ceremony recognized outstanding innovations across various categories, with substantial prizes awarded to top performers.

- ✦ First place: Team ATG (AI-powered gesture-based writing system)
- ✦ First runners-up: LOCAL HOST (personalized learning platform for dyslexic students)
- ✦ Second runners-up: ALCHEMIST (adaptive AI-powered learning assistant)

Workshops

KEMRI's Centre for Virus Research (CVR) symposium, 11th - 13th September, 2024.

MKU researchers also participated in the inaugural symposium hosted by KEMRI's Centre for Virus Research (CVR), held under the theme "Accelerating Virus Research: Achievements, Challenges and Opportunities." The three-day event brought together leading scientists, public health stakeholders, and policymakers to discuss recent advancements in virus research, public health strategies, and the development of health products and technologies. Our team contributed by engaging in presentations, discussions, and knowledge exchange aimed at advancing virus research and public health impact in Kenya and beyond.

Parasitology Workshop - 14th-15th May 2024 (Hosted by the Center for Malaria Elimination, Mount Kenya University)

The Center for Malaria Elimination (CME) at Mount Kenya University hosted a highly successful Parasitology Workshop from May 14th to 15th, 2024, at the Mwai Kibaki Convention Centre. Under the theme "Accelerating Malaria Vaccine and Drug Research in Africa: Opportunities and Challenges," this workshop brought together distinguished researchers, scientists, and students from Africa and Japan to discuss the latest advances in malaria research, drug development, and diagnostic innovations.

Key international speakers included:

- ❖ Takafumi Tsiboi MD, PhD (Ehime University, Japan)
- ❖ Daisuke Ito, PhD (Tottori University, Japan)
- ❖ Hideyuki Iriko, PhD (Kobe University, Japan)
- ❖ Mayumi Tachibama, PhD (Ehime University, Japan)

Regional experts included:

- ❖ Dr. Jesse Gitaka (MKU, Kenya) — Workshop host and CME lead investigator
- ❖ Dr. Bernard Kanoi (MKU, Kenya) — Workshop host and senior researcher at CME
- ❖ Dr. Lucy Ochola (KIPRE, Kenya)
- ❖ Dr. Ruth Nyokabi (KEMRI, Kenya)
- ❖ Dr. Daniel Kisii (JMMI, Kenya)

The workshop facilitated robust scientific discussions on:

- ❖ The future of malaria vaccine development
- ❖ Novel drug research pipelines targeting malaria parasites
- ❖ Challenges in translating research findings into field solutions
- ❖ Collaborative opportunities between African and Japanese institutions

Parasitology Workshop



"Accelerating Malaria Vaccine and Drug Research in Africa: Opportunities and Challenges"



Are you passionate about combating malaria? Don't miss this unique opportunity! Our workshop brings together leading researchers from Africa and beyond. Explore cutting-edge opportunities, tackle challenges, and collaborate on groundbreaking solutions.

Let's make a difference together!



Takafumi Tsiboi, MD, PhD, Ehime University, Japan.



Daisuke Ito, PhD, Tottori University, Japan.



Daniel Kisii, PhD, JKUAT, Kenya.



Hideyuki Iriko, PhD, Kobe University, Japan.



Mayumi Tachibana, PhD, Ehime University, Japan.



Lucy Ochola, PhD, KIPRE, Kenya.



Ruth Nyokabi, PhD, KEMRI, Kenya.

May 14th-15th, 2024



Jesse Gitaka, PhD, MKU, Kenya.



Bernard Kanoi, PhD, MKU, Kenya.

Mwai Kibaki Convention Centre

SPONSORS



The workshop facilitated robust scientific discussions on:

- ❖ The future of malaria vaccine development
- ❖ Novel drug research pipelines targeting malaria parasites
- ❖ Challenges in translating research findings into field solutions
- ❖ Collaborative opportunities between African and Japanese institutions

Sponsors included:

- ❖ Africa Biosystems Ltd.
- ❖ Mount Kenya University

This workshop not only provided a platform for scientific exchange but also strengthened international collaborations and inspired emerging researchers to contribute toward tackling the persistent challenge of malaria in Africa.

14th KEMRI Annual Scientific and Health Conference (KASH), 13-16 February 2024, Nairobi, Kenya

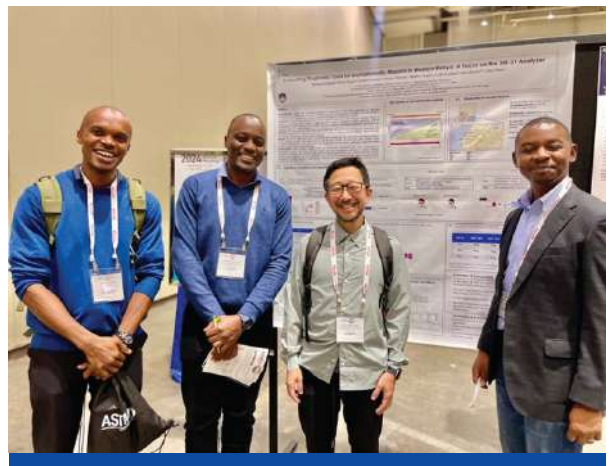
Our researchers actively participated in the KEMRI Annual Scientific and Health Conference (KASH), a flagship scientific gathering launched in 2010 to promote dissemination of research findings, collaboration, and strengthening of health research capacity in Kenya. The conference attracted research scientists, health professionals, and students from across the country.

Our team delivered both oral and poster presentations spanning key thematic areas such as antimicrobial resistance (AMR) and malaria research. Notably, one of our malaria-focused oral presentations was recognized with the prestigious 3rd place award for best oral presentation, demonstrating the strength and impact of CME's research efforts.

International Conferences Attended

ASTMH Annual Meeting 2024, New Orleans, Louisiana - November 13 - 17, 2024

Our senior researchers proudly participated in the Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH) – the leading global forum for exchanging cutting-edge scientific and clinical



developments in tropical medicine, hygiene, and global health. The five-day event featured world-class research findings, clinical updates, and timely discussions on pressing global health challenges, delivered by leading scientific experts and thought leaders from around the world. The meeting drew thousands of professionals representing academia, government agencies, foundations, non-governmental organizations, private sectors, the military, and healthcare providers, offering our researchers unparalleled opportunities for networking, learning, and collaboration.

Multilateral Initiative on Malaria (MIM) Society 8th Pan-African Malaria Conference - 21st - 27th April, 2024, Kigali, Rwanda.

Our researchers actively participated in the Multilateral Initiative on Malaria (MIM) Society 8th Pan-African Malaria Conference. The conference, themed “Grassroots Mobilization to End Malaria: Invest, Innovate & Integrate”, brought together leading malaria researchers, policymakers, and innovators from across Africa and beyond.

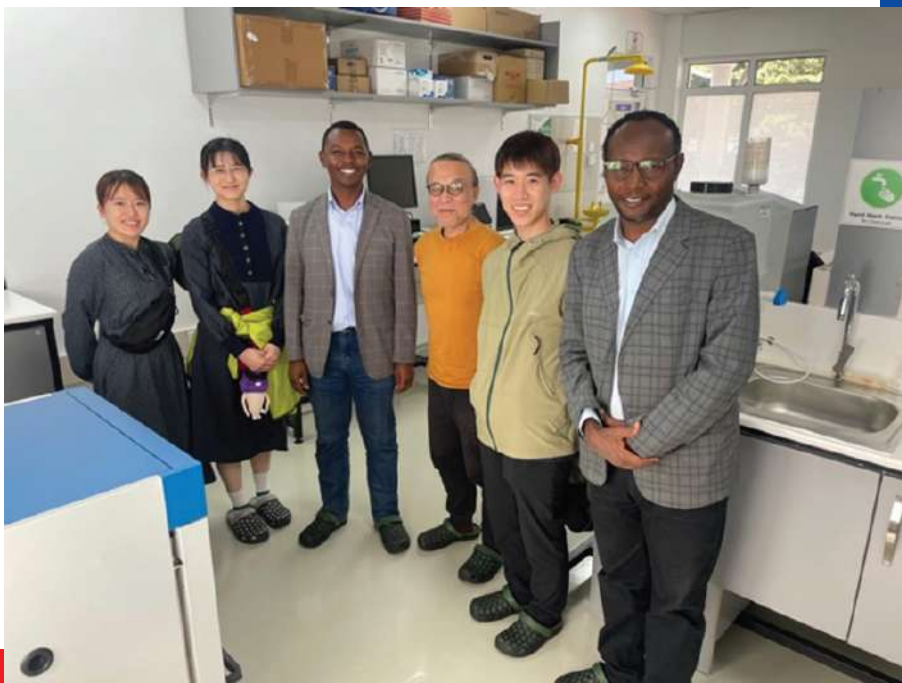
Researchers from the Center for Malaria Elimination (CME) presented both oral presentations and scientific posters across multiple thematic areas, including Malaria Genomics (Human-Anopheles-Plasmodium), Malaria Epidemiology, Modelling, Surveillance, and Impact.

The event provided an excellent platform for sharing our findings, showcasing innovations, and engaging in collaborative discussions with continental and global stakeholders. Our participation contributed to strengthening locally driven research efforts and building partnerships aimed at accelerating malaria control and elimination in Africa.

Looking ahead, we encourage participation in upcoming events such as **7th Africa International Biotechnology and Biomedical Conference (AIBBC 2025)**, 29th - 31st October 2025 to be hosted by Mount Kenya University.

CME Seminars

The Center for Malaria Elimination (CME) has actively organized a series of local seminars featuring both international and local scientists. These seminars have provided an interactive platform for sharing cutting-edge research, fostering intellectual exchange, and exploring innovative solutions to health challenges. The seminars are listed below:



- ❖ Evaluation of the effectiveness and impacts of the world's first malaria vaccine in the real-world setting in Kenya - Yura Ko, PhD, Researcher, Karolinska Institutet, Sweden - 13th February 2025
- ❖ Spillover Effects of Malaria Interventions in Sub-Saharan Africa Using Demographic and Health Survey Data - Toska Sidorczuk - Karolinska Institutet, Sweden - 13th February 2025
- ❖ Investigating host immune responses to malaria infections in the field transmission setting through single-cell RNA sequencing - Lisa Li - Fullbright fellow, Karolinska Institutet, Sweden - 13th February 2025
- ❖ Climate variability and Malaria in Kenya - Prof Noboru Minakawa - 20th January 2025
- ❖ Transforming the post-discharge follow-up for Low-Birth-Weight (LWD) infants in Kenya - Dr Helen Nabwera, BMedSci, BM BS, MRCPCH, DTM&H, PhD, FHEA, FRCPCH, Senior Clinical Lecturer Liverpool School of Tropical Medicine - 30th October 2024.
- ❖ Impact of chronic cytomegalovirus (CMV) infection on breast cancer metastasis - Dr. Denise Hemmings, University of Alberta - 30th July 2024
- ❖ Developing a vaccine against placental malaria Dr. Stephanie Yanow University of Alberta - 20th July 2024
- ❖ Infectious diseases geospatial modeling - Dr. Punam Amratia, Technical Lead of the Malaria Atlas Project - 17th July 2024

❖ Understanding the link between climate change and infectious diseases, and developing early warning systems for climate-sensitive diseases - Dr. James Colborn, Senior Malaria Advisor for Clinton Health Access Initiative (CHAI) - 24th June 2024.

❖ The State of Copper in the Cell - Prof. David Huffman, Department of Chemistry, Western Michigan University, USA - 26th April 2024.

❖ The wheat germ cell-free system: A potential game - changer in identifying silent malaria carriers- Eizo Takashima, Ph.D, Associate Professor, Proteo-Science Center, Ehime University, Japan - 18th April 2024.



- ❖ Calendar of upcoming research symposia
- ❖ Workshops and training opportunities



Theme: Transforming Health through Innovative Research

Conference topics (29 – 31 October, 2025):



Ole Sereni Hotel



Registration

<https://primateresearch.org/events/international-biotechnology-and-biomedical-workshop-and-conference-2025/>



isc2025@primateresearch.org

- Fighting infectious and emerging diseases – Africa focus and strategies
- Cytometry for life sciences and clinical applications
- NTD diagnostics and therapeutic technologies
- Drug development in the face of resistance challenges
- Genomics and artificial intelligence
- Climate change and impact on disease ecology
- Community engagement and policies for sustainable health and interventions
- Primate behaviour, ethics and medicine

Workshops (27 – 29 October, 2025)

- Flow cytometry: Basic & Application - MKU
- Point of care diagnostics for resource-limiting settings - MKU
- Molecular diagnostics for infectious diseases - MKU
- Viral infections and antimicrobial stewardship - MKU
- Malaria control and elimination strategies - MKU
- Genomics and bioinformatics - MKU
- Laboratory animal sciences - KIPRE

❖ Call for papers and research participation

9.

Impact of Research on Community and Industry

❖ **Community Outreach and Partnerships:**

The university actively engages in community outreach programs, extending services that positively impact local communities. Through synergetic partnerships with over 100 local, regional, and international institutions, MKU facilitates industry-academia linkages, enhancing research applicability and fostering socio-economic development.

Prof. Jesse (Principal Investigator, MKU), Dr Kanoi and Dr Mwaura engaging the community in Homabay County. The Malaria Project spearheaded by Mount Kenya University aims to reduce malaria infection burden through provision of Ceiling Nets and Public Education.



❖ **Research and Innovation Funding:** In 2024, MKU allocated KES 30 million to the Vice Chancellor's Research and Innovation Grant. This funding supports school-based research projects, publications in peer-reviewed journals, conference participation, and community service initiatives. Such financial commitment underscores MKU's dedication to fostering research that addresses socio-economic challenges and contributes to societal development.

❖ **Innovation Recognition:** MKU's emphasis on impactful research is exemplified by the achievements of its innovators. For instance, in September 2023, Mr. Donatus Njoroge's project, "Molepse BioResources," won the "Special Impact" category award at the ISC3 Innovation Challenge on Sustainable Chemistry and Agriculture in Germany. His innovation focuses on developing eco-friendly pesticides, demonstrating MKU's role in promoting sustainable solutions with real-world applications.

✦ **Research and Innovation Week:** In October 2024, MKU hosted its Research and Innovation Week, designed to promote research, creativity, and entrepreneurship among students and staff. The event included a hackathon focusing on advancements in Artificial Intelligence (AI), providing participants with hands-on experience and exposure to new ideas beyond traditional employment avenues.

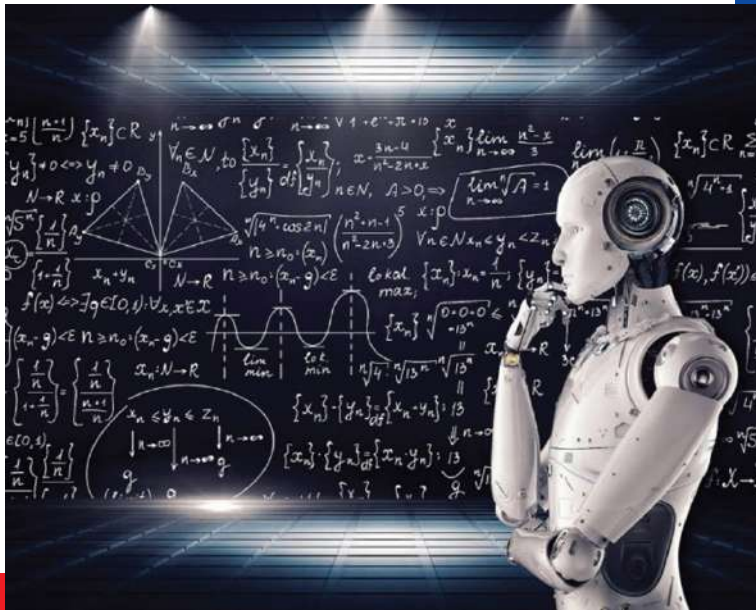
✦ **United Nations Academic Impact Hub:** MKU's commitment to societal development has been recognized through its appointment as the United Nations Academic Impact (UNAI) Hub for Sustainable Development Goal (SDG) 9, which focuses on industry, innovation, and infrastructure. This role involves championing efforts that foster inclusive societies and reduce inequalities, further highlighting MKU's influence on community and industry.

10.

Future Research Directions

❖ Emerging research areas

Artificial Intelligence (AI) for Clinical Decision Support at the CME



❖ Recognizing the transformative potential of artificial intelligence (AI) in healthcare, we are actively integrating AI into clinical decision support systems. Our research in this area focuses on developing intelligent algorithms that can analyze complex diagnostic data in real time, thereby aiding clinicians in making more informed treatment decisions. By merging traditional diagnostic data with AI-driven insights, we enhance the speed and accuracy of clinical assessments. Our collaborations with platforms such as Aifya and NCDai underscore our commitment to leveraging advanced computational tools to address clinical challenges. These AI systems are designed to process large datasets, identify patterns, and predict disease outcomes, offering clinicians a powerful resource for patient management. As we refine these technologies, our goal is to create robust, user-friendly decision support tools that integrate seamlessly into everyday clinical practice, ultimately improving patient outcomes and optimizing resource utilization.

Visit www.aifya.co.ke for more information

- ❖ Strategic research priorities
- ❖ New research initiatives and opportunities

Funding trends and opportunities

- ❖ AIMS Masters scholarships: <https://nexteinstein.org/>
- ❖ International Union of Immunological Societies (IUIS), 19th International Congress of Immunology: <https://iuis2025.org/>



Join us in creating a world where all children can play , learn , and thrive .

Today, we're launching **Play Learn Thrive** , an initiative that supports bold, play-based innovations to create strong support systems for children in complex crisis settings so that they can play, learn, and thrive.

With funding from [The Lego Foundation](#) , we're providing **Proof of Concept** and **Transition to Scale** funding in Kenya, Uganda, Lebanon and Jordan.

Play Learn Thrive brings together Grand Challenges Canada's expertise in both early childhood development and humanitarian innovation from our [Saving Brains](#) and [Creating Hope in Conflict: A Humanitarian Grand Challenge](#) portfolios, enabling innovation testing and scaling that nurtures children's growth and development.

Applications are open from **today, January 21, 2025** . The deadline for Proof of Concept proposals is **April 24, 2025** , while Transition to Scale applications are accepted on a rolling basis through **November 27, 2025** .

- ❖ <https://www.grandchallenges.ca/funding-opportunities/>
- ❖ Osaka University MEXT Scholarships 2025 in Japan. Fully funded opportunities for international students to pursue undergraduate, master's, and doctoral degrees. Awarded by Japan's Ministry of Education, Culture, Sports, Science, and Technology (MEXT), this prestigious scholarship covers tuition fees, a monthly stipend:
 - ❖ <https://opportunitiespedia.com/osaka-university-mext-scholarships-2025/>
 - ❖ African STARS Fellowship Programme: <https://www.starsfellows.africa/>
 - ❖ Free AMR online courses
 - ❖ Please register using this link.
 - ❖ <https://www.open.edu/openlearncreate/course/index.php?categoryid=415>
 - ❖ EMBL-UNESCO Residency in Infection Biology Research: <https://www.embl.org/about/info/scientific-visitor-programme/fellowships/embl-unesco-fellowships/>



OPPORTUNITY

POSTDOCTORAL POSITION



Research on drug discovery
of new antimalarial drugs

Project: Characterization and deconvolution of the mode of action of new molecules with antiplasmodial activity

Where: Laboratory of Tropical Diseases (Institute of Biology, University of Campinas - UNICAMP)
coordinated by Prof. Fabio Trindade M Costa, PhD



MINIMUM REQUIREMENTS

- (I) PhD in a related field (Parasitology, Microbiology, Pharmacy, Medicine);
- (II) Recent record of scientific publications.

DESIRABLE REQUIREMENTS

- (I) Experience in cell culture and phenotypic assays with *Plasmodium* spp.



Join us

Send a brief CV, link to your Lattes and two references from professionals in the field to Prof. Fabio Costa:
fabiotmc72@gmail.com



- ❖ 2025 Early Career Grants Applications: <https://www.rstmh.org/2025-early-career-grants-applications>
- ❖ CavX PhD program: <https://cavx.at/open-positions/>

Other funding opportunities

- ❖ The Global Health Network Africa

Focus: Empowering African researchers by connecting them with resources for impactful research.

Opportunities: Regularly updated funding opportunities spanning various fields of global health and beyond.

More Information: https://africa.tghn.org/funding/?utm_source=chatgpt.com
- ❖ FundsforNGOs provide listings of open small grant opportunities for African countries. https://www2.fundsforngos.org/listing/a-list-of-open-small-grant-opportunities-for-african-countries/?utm_source=chatgpt.com
- ❖ Multilateral and Governmental Organizations
 - **European Union (EU) - Horizon Europe**
Funds research & innovation collaborations, including African institutions.
 - **African Union (AU) Research Grants**
Supports science, technology, and innovation (STI) research in Africa.
 - **United Nations Development Programme (UNDP)**
Provides grants for research on sustainable development.
 - **World Bank - Development Impact Evaluation (DIME)**
Funds policy-relevant research in Africa.
 - **United States Agency for International Development (USAID)**
Supports research on health, education, and economic development.
- ❖ Science and Research-Specific Funders
 - African Academy of Sciences (AAS) - AESA (Alliance for Accelerating Excellence in Science in Africa). Manages multiple grants for African researchers.
 - Bill & Melinda Gates Foundation
Supports health, agriculture, and innovation research.
 - Wellcome Trust
Funds biomedical and health research in Africa.
 - National Institutes of Health (NIH, USA)
Provides funding for health research in Africa.

- International Development Research Centre (IDRC, Canada)
Supports research on social and economic development.

✦ Academic and Innovation Grant Funders

- Carnegie Corporation of New York
Supports higher education and research in Africa.
- The Royal Society (UK)
Funds early-career African scientists in STEM fields.
- DAAD (German Academic Exchange Service)
Provides research grants for African scholars.
- Alexander von Humboldt Foundation
Supports African researchers for academic collaboration with Germany.
- Erasmus+ (European Commission)
Funds higher education and research collaborations with Africa.

✦ Private Foundations and Industry Funders

- **Ford Foundation**
Provides grants for research on social justice and human rights.
- **Rockefeller Foundation**
Funds research on health, food systems, and resilience.
- **Schmidt Futures**
Supports emerging African researchers in technology and innovation.
- **Mastercard Foundation**
Funds research on youth employment and entrepreneurship.
- **Google Research Africa**
Provides grants for AI and technology-related research.
- **European & Developing Countries Clinical Trials Partnership (EDCTP)**

Focus: Supports collaborative clinical research to accelerate the development of medical interventions against poverty-related diseases in sub-Saharan Africa.

More Information: <https://www.edctp.org/>

- **International Fund for Agricultural Development (IFAD)**

Focus: Provides grants for agricultural research and rural development projects to improve food security and reduce poverty in developing countries, including those in Africa. More Information: <https://www.ifad.org/>

- **African Development Bank (AfDB)**

Focus: Offers funding for research and development projects that promote economic growth and social progress across African nations.

More Information: <https://www.afdb.org/>

➤ Swedish International Development Cooperation Agency (Sida)

Focus: Provides grants for research cooperation to strengthen research capacity and knowledge production in low-income countries, particularly in sub-Saharan Africa.

More Information: <https://www.sida.se/>

➤ Norwegian Agency for Development Cooperation (Norad)

Focus: Supports research initiatives that contribute to poverty reduction and sustainable development in African countries.

More Information: <https://www.norad.no/>

✕ Science and Research-Specific Funders

➤ International Foundation for Science (IFS)

Focus: Provides grants to early-career scientists in developing countries, including Africa, to conduct research in natural and applied sciences.

More Information: <https://www.ifs.se/>

➤ The Royal Society – Africa Prize

Focus: Recognizes and supports outstanding early-career African scientists with grants to aid their research efforts.

More Information: www.royalsociety.org

➤ The Leverhulme Trust

Focus: Offers research fellowships and grants to support international collaborations, including partnerships with African researchers.

More Information: <https://www.leverhulme.ac.uk/>

➤ The Volkswagen Foundation

Focus: Funds cooperative research projects between German and African scholars, particularly in the humanities and social sciences.

More Information: <https://www.volkswagenstiftung.de/>

➤ The Wellcome Trust – International Master's Fellowships

Focus: Provides funding for researchers from low- and middle-income countries to pursue a Master's degree in a health-related field, including those in Africa.

More Information: www.wellcome.org

➤ The British Academy

Focus: Offers funding for research in the humanities and social sciences, supporting collaborations between UK and African scholars.

More Information: <https://www.thebritishacademy.ac.uk/>

➤ The Newton Fund

Focus: Provides grants to support science and innovation partnerships between the UK and developing countries, including several African nations.

More Information: <https://www.newtonfund.ac.uk/>

➤ The African Research Universities Alliance (ARUA)

Focus: Offers grants to promote research collaboration among African universities and with international partners.

More Information: <https://arua.org.za/>

➤ The Consortium for Advanced Research Training in Africa (CARTA)

Focus: Provides grants and fellowships to support doctoral training and research in public health and social sciences across African institutions.

More Information: <https://cartafrica.org/>

➤ The Science for Africa Foundation

Focus: Offers research grants and supports initiatives to strengthen the research ecosystem across the African continent.

More Information: <https://scienceforafrica.foundation/>

❖ Private Foundations and Industry Funders

➤ The Open Society Foundations

Focus: Provides grants for research and advocacy projects that promote democratic governance, human rights, and social justice in Africa.

More Information: <https://www.opensocietyfoundations.org/>

➤ The MacArthur Foundation

Focus: Supports research initiatives addressing global challenges, including those affecting African societies.

More Information: <https://www.macfound.org/>

➤ The Andrew W. Mellon Foundation

Focus: Provides grants for higher education and scholarship in the humanities and arts, supporting institutions and researchers in Africa.

More Information: <https://mellon.org/>

➤ The Mastercard Foundation Scholars Program

Focus: Offers grants to support academic and research opportunities for young Africans, emphasizing leadership and community service.

More Information: <https://mastercardfoundation.org/>

➤ The Google AI Impact Challenge

Focus: Provides grants to support innovative artificial intelligence research and applications that address societal challenges, including projects led by African researchers.

More Information: <https://ai.google/>

College of Graduate Studies Staff 2025



Dr. Francis Makokha
Outgoing Director, Research
and Innovation
Fmakokha@mku.ac.ke



Dr. Henry Yatich
Principal
hyatich@mku.ac.ke



Prof. Jesse Gitaka
Director Grants and
Development
jgitaka@mku.ac.ke



Dr. Lucy Wairimu Kibe
Deputy Director Graduate
Studies, MKU



Mount Kenya University



Dr. Samuel Karenga
Director, Graduate Studies
skarenga@mku.ac.ke



Dr. Martin Onsiro
Deputy Director Graduate
Studies, MKU



Rose Masibili
Deputy Director Graduate
Studies, MKU



Dr. Jared Onyancha
Head, University Research
Centre
jonyancha@mku.ac.ke



Mr. Donatus Njoroge
Head, Innovation, IP and
Community Engagement
dnjoroge@mku.ac.ke



Mr. Joel Malala
Head, Grants Office
jmalala@mku.ac.ke



Dr. Isaac Mokono Abuga
Post graduate Co-ordinator
Nairobi Campus



John Kariuki
Assistant Registrar, MKU



Mount Kenya University



Marion Mwangi
Assistant Registrar, MKU



Ms. Judy Mokaya
College Admin Assistant
jmokaya@mku.ac.ke



Zipporah Wothaya
Assistant Registrar, MKU



Miriam Nderitu
Assistant Registrar, MKU

Mount Kenya University



ENROLL NOW IN ANY OF THE FOLLOWING SCHOOLS

Annual Intakes: January, May and September

Mount Kenya University (MKU) a Chartered, ISO 9001:2015 certified University, is committed to offering holistic education and promoting a robust research culture. The University, a practitioner of the internationalization of higher education, has campuses in Kenya and Rwanda, and a vibrant online platform. The University's academic programmes are innovative and responsive to national and international scientific and technological needs. MKU offers medical, health and applied science programmes as well as liberal arts. It actualizes opportunities for personal enrichment, professional preparedness and scholarly advancement.

SCHOOL OF LAW

- Master of laws (LLM)
- Bachelor of laws (LLB)
- Diploma in law

MEDICAL SCHOOL

- Doctor of Philosophy in Medical Laboratory Sciences
- Master of Science in Medical Laboratory Sciences
- Bachelor of Medicine and Bachelor of Surgery (MB ChB)
- BSc. Dental Technology
- BSc. Oral Health
- BSc. Medical Laboratory Sciences
- Diploma in Dental Technology
- Diploma in Community Oral Health

SCHOOL OF PHARMACY

- Bachelor of Pharmacy
- Diploma in Pharmaceutical Technology

SCHOOL OF CLINICAL MEDICINE

- Master of Clinical Medicine
- BSc. In Clinical Medicine and Community Health
- BSc. Health Records and Information Management
- Diploma in Clinical Medicine and Surgery
- Diploma/ Certificate in Health Records and Information Technology

SCHOOL OF NURSING

- PhD Nursing
- Master of Science in Nursing
- BSc. Nursing

SCHOOL OF PUBLIC HEALTH

- PhD Public Health
- Master of Science in Nutrition and Dietetics
- Master of Public Health
- Master of Health Systems Management
- Master of Science in Community Health
- Master of Science in Health Education and Promotion
- Master of Science in Food Science and Safety
- Bachelor of Public Health
- BSc. Nutrition and Dietetics
- BSc. Food Science and processing
- BSc. Health Systems Management
- BSc. Community Health
- BSc. Health Education and Promotion
- Diploma/ Certificate in Nutrition and Dietetics
- Diploma in Food Science and processing Technology
- Diploma/ Certificate in Community Health

SCHOOL OF BUSINESS AND ECONOMICS

- PhD Business Administration and Management
- MSc. in Procurement and Supplies Management

- MSc. in Project Planning and Management
- Master of Arts in Public Administration and Management
- Master of Arts in Economics
- Master of Business Administration
- Postgraduate Diploma in Project Planning and Management
- Bachelor of Business Management
- Bachelor of Procurement
- Bachelor of Arts in Public Administration
- Bachelor of Office Management and Administration
- Bachelor of Science in Economics
- Bachelor of Science in Economics and Statistics
- Bachelor of Science in Finance and Statistics
- Bachelor of Economics
- Bachelor of Commerce
- Diploma/ Certificate in Human Resource Management
- Diploma/ Certificate in Business Management
- Diploma in Maritime Transport Logistics
- Certificate in Maritime Transport Logistics
- Diploma/ Certificate in Supplies and Procurement Management
- Diploma in Project Management
- Diploma/ Certificate in Banking & Finance

SCHOOL OF COMPUTING AND INFORMATICS

- MSc. in Information Security (Cyber Crime)
- MSc. in Information Science
- MSc. in Information Technology
- BSc. Information Technology
- BSc. Information Science
- Bachelor of Business Information Technology
- Diploma in Information Technology
- Diploma in Computer Science
- Diploma/ Certificate in Business Information Technology

SCHOOL OF EDUCATION

- Doctor of Philosophy in Education
- Doctor of Philosophy in Early Childhood Studies
- Master of Education
- Master of Education in Special Needs Education
- Master of Education (Early Childhood Studies)
- Postgraduate Diploma in Education [PGDE]
- Bachelor of Education (Science)
- Bachelor of Education (Arts)
- Bachelor of Education in Primary Education
- Bachelor of Education in Special Needs (Primary Education)
- Bachelor of Education in Special Needs (Secondary Education)
- Bachelor of Education in Early Childhood Studies
- Diploma in Special Needs Education
- Diploma in Early Childhood Studies

SCHOOL OF ENGINEERING, ENERGY AND BUILT ENVIRONMENT

- MSc. Renewable Energy and Environmental Engineering
- BSc. in Energy and Environmental Technology

- Bachelor of Science in Petroleum Exploration and Production
- BSc. Real Estate Management
- Bachelor of Technology in Computer and Electronic Systems
- Diploma in Electrical and Electronics Engineering
- Diploma in Medical Engineering

SCHOOL OF SOCIAL SCIENCES

- PhD in Counseling Psychology
- PhD in Development Studies
- PhD in Sociology
- Master of Arts in Development Studies
- Master of Arts in Monitoring and Evaluation
- Master of Arts in International Relations and Diplomacy
- Master of Arts in Security Studies and Criminology
- Master of Arts in Governance and Ethics
- Master of Arts in Journalism and Media Studies
- Bachelor of Arts in International Relations and Diplomacy
- Bachelor of Arts in Development Studies
- Bachelor of Arts in Community Development
- Bachelor of Arts in Sociology
- Bachelor of Social Work and Administration
- Bachelor of Arts in Security Studies and Criminology
- Bachelor of Arts in Peace Studies and Conflict Resolution
- Bachelor of Arts in Public Administration and Governance
- Bachelor of Arts in Justice and Security Studies
- Bachelor of Counselling Psychology
- Bachelor of Arts in Film and Animation Studies
- Bachelor of Arts in Mass Media and Communication
- Diploma/ Certificate in Community Development and Social work
- Diploma in counselling Psychology
- Diploma / Certificate in Journalism and Mass Communication
- Diploma / Certificate in Public Relations and Diplomacy
- Diploma / Certificate in Security Studies and Criminology
- Diploma in County Governance and Administration

SCHOOL OF HOSPITALITY, TRAVEL AND TOURISM MANAGEMENT

- MSc. in Hospitality Management
- BSc. in Hospitality Management
- BSc. in Travel and Tourism Management
- Diploma in Hospitality Management
- Diploma in Travel and Tourism Management

- Diploma in Culinary Arts
- Certificate in Food Production
- Certificate in Travel and Tourism Operations

SCHOOL OF PURE AND APPLIED SCIENCES

- PhD in Applied Entomology
- PhD in Ecology
- PhD in Zoology/Botany
- PhD in Conservation Biology
- PhD in Molecular Biology
- PhD in Chemistry
- PhD in Natural Products Chemistry
- PhD in Immunology
- MSc. in Chemistry
- MSc. in Statistics
- MSc. in Applied Entomology
- MSc. (Ecology and Conservation Biology)
- MSc. (Biotechnology)
- BSc. in Biotechnology
- BSc. in Applied Biology
- BSc. in Environmental Science
- BSc. in Laboratory Technology
- BSc. in Industrial Chemistry
- BSc. in Statistics
- BSc. in Actuarial Sciences
- BSc. in Animal Health & Production
- BSc. in Agriculture & Rural Development
- BSc. in Animal Science
- Diploma/ Certificate in Animal Health & Production
- Certificate in Artificial Insemination



Mount Kenya University Main Campus, Thika, Kenya

For more information kindly contact, Registrar, Academic Administration.

Mount Kenya University, Main Campus, Thika, Kenya.
Website: www.mku.ac.ke
Email: info@mku.ac.ke, admissions@mku.ac.ke
Telephone: +254 709 153 000 / +254 20 2878 000
WhatsApp: +254 722 999 399
Facebook: Mount Kenya University
Twitter: MountKenyaUni

MKU RWANDA
KAGARAMA, KICUKIRO DISTRICT
Email: rwanda@mku.ac.ke
Tel: +250 788125088
WhatsApp: +250 781481176
Facebook: OfficialMountKenyaUniversityRwanda
Twitter: @mountkenyauniRw
Instagram: mountkenyauniversityrwanda

COUNTRY OFFICES:
BURUNDI
Email: burundi@mku.ac.ke
UGANDA +256 758 666 190
Email: kampala@mku.ac.ke
HARGEISA-SOMALILAND +252 571 100
Email: hargeisa@mku.ac.ke

www.mku.ac.ke

Unlocking Infinite Possibilities

ISO 9001:2015 Certified University

College of Graduate Studies & Research

P.O. Box 342 - 01000 Thika.

Tel: +254 709 153 173

Web: <https://cgsr.mku.ac.ke/>

Email: cgsr@mku.ac.ke

