



**NATIONAL INSTITUTE FOR
MEDICAL RESEARCH [NIMR]**



NIMR NEWSLETTER

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About this Newsletter

This NEWSLETTER provides updates on the key activities conducted by NIMR. NIMR was established by NIMR Act No. 23 of 1979 (CAP. 59 (R.E. 2002) and continues to implement its core functions, which include conduct of health research, coordination, control and monitoring the carryout of research in the country. NIMR is also mandated to ensure the effective utilization of the generated scientific evidence wide range of audiences through proper dissemination channels. The following events took place from October to December 2025.



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INSTITUTIONAL MILESTONES

NIMR Unveils Genomic Evidence Showing Predominance of Bacterial Pathogens in Acute Respiratory Infections in Tanzania



Participants from the Ministry of Health, NIMR, ILI/SARI sentinel sites, NPHL, and CDC Tanzania pose for a group photo after the dissemination of findings from the Genomic Characterization of Acute Respiratory Infections (ARI) Pathogens in Tanzania, held on 22 December 2025 at the Ministry of Health headquarters, Mtumba–Dodoma.

The National Institute for Medical Research (NIMR) on 22 December 2025 disseminated key findings from the research project titled Genomic Characterization of Acute Respiratory Infections (ARI) Pathogens in Tanzania at the Ministry of Health (MoH) headquarters in Mtumba, Dodoma. The dissemination event was officiated by the Acting Director of Preventive Services, Dr Vida Mbaga, and attended by heads of surveillance sections from the MoH, representatives from ILI/SARI sentinel sites, the National Public Health Laboratory (NPHL), and the United States Centers for Disease Control and Prevention (CDC) Tanzania. The gathering underscored the importance of multisectoral collaboration in addressing national public health priorities. Presenting the key findings, Dr Juma Kisuse

from NIMR explained that the study applied targeted Next-Generation Sequencing (tNGS) technology to comprehensively profile circulating respiratory pathogens and their associated antimicrobial resistance (AMR) genes. A total of 484 samples were randomly selected from the national ILI/SARI surveillance system and analyzed, covering the period from October 2023 to September 2024 across five geographical zones: Northern, Lake, Central, Coastal, and Southern Highlands. The analysis revealed a predominance of bacterial pathogens, notably *Streptococcus mitis*, *Streptococcus pneumoniae*, and *Haemophilus influenzae*, compared to the commonly reported viral pathogens. Further analysis revealed a high burden of bacterial and viral co-infections, with 89.5 percent of patients harbouring between two and four-

teen pathogens. Thirty percent of the patients exhibited mixed bacterial and viral co-infections, highlighting the complexity of ARI diagnosis and management. The findings also showed that bacterial pathogens circulated throughout the year, with pronounced peaks between June and December, while viral pathogens demonstrated sharper, pathogen-specific peaks, including CMV in March, Adenovirus in May, and SARS-CoV-2 in January and September. In addition, the study identified a high prevalence of antimicrobial resistance genes associated with Doxycycline, Beta-lactamases, and Sulphonamides.

In his concluding remarks, the Director General of NIMR, Prof. Said Aboud, noted that infections caused by *Streptococcus mitis*, *Streptococcus*

pneumoniae, and *Haemophilus influenzae* were more frequent than viral infections, demonstrating a notable shift in the epidemiological trend from viral to bacterial dominance. He emphasized the importance of strengthening immunization against *Haemophilus influenzae* type b, which is included in the pentavalent (Penta 5) vaccine. Prof. Aboud further called for broadening the scope of ARI surveillance beyond SARS-CoV-2 and influenza to include a wider range of pathogens, with increased application of tNGS to better guide evidence-based interventions. He concluded by commending the entire study team, including Dr Mary Mayige, Dr Clara Lubinza, Dr Gibson Kagaruki, Sudi Lwitiho, and Dr Seth Misago, for their contribution to the study.



Participants attentively follow a scientific presentation during the dissemination meeting on the Genomic Characterization of Acute Respiratory Infections (ARI) Pathogens in Tanzania, held on 22 December 2025 at the Ministry of Health headquarters, Mtumba–Dodoma.

DIRECTOR GENERAL'S HIGHLIGHTS

NIMR DG Leads Institutional Review Boards Training to Elevate Clinical Trial Standards Nationwide

The Director General of the National Institute for Medical Research (NIMR), Prof. Said Aboud, has led a specialized training for members and secretariats of Institutional Review Boards (IRBs) to enhance Tanzania's clinical trial oversight. The two-day session follows an earlier training for clinical trial researchers held in November 2025.

Opening the training, Prof. Aboud emphasized that strong ethical oversight is key to credible and high-quality clinical research. "This training equips IRBs with the knowledge and tools to protect participants and improve efficiency in trial review," he said.

The programme, part of the TRACE Project funded by the Gates Foundation, aims to harmonize ethics and regulatory systems across Africa, strengthen digital review platforms, and support accreditation and sustainability of IRBs. Participants engaged in sessions on ethical review, workflow optimization, NatHREC procedures, and handling serious adverse events.

By the end of the training, participants are expected to return to their institutions with enhanced skills to ensure integrity, transparency, and efficiency in Tanzania's clinical trial ecosystem. Prof. Aboud described the initiative as a milestone for building a globally competitive, ethical clinical research environment.



Director General of NIMR Prof. Said Aboud addressing participants during the opening session of the Institutional Review Boards (IRBs) training, emphasizing the importance of ethical oversight in clinical trials

EVENTS

NIMR Enhances Its International Visibility

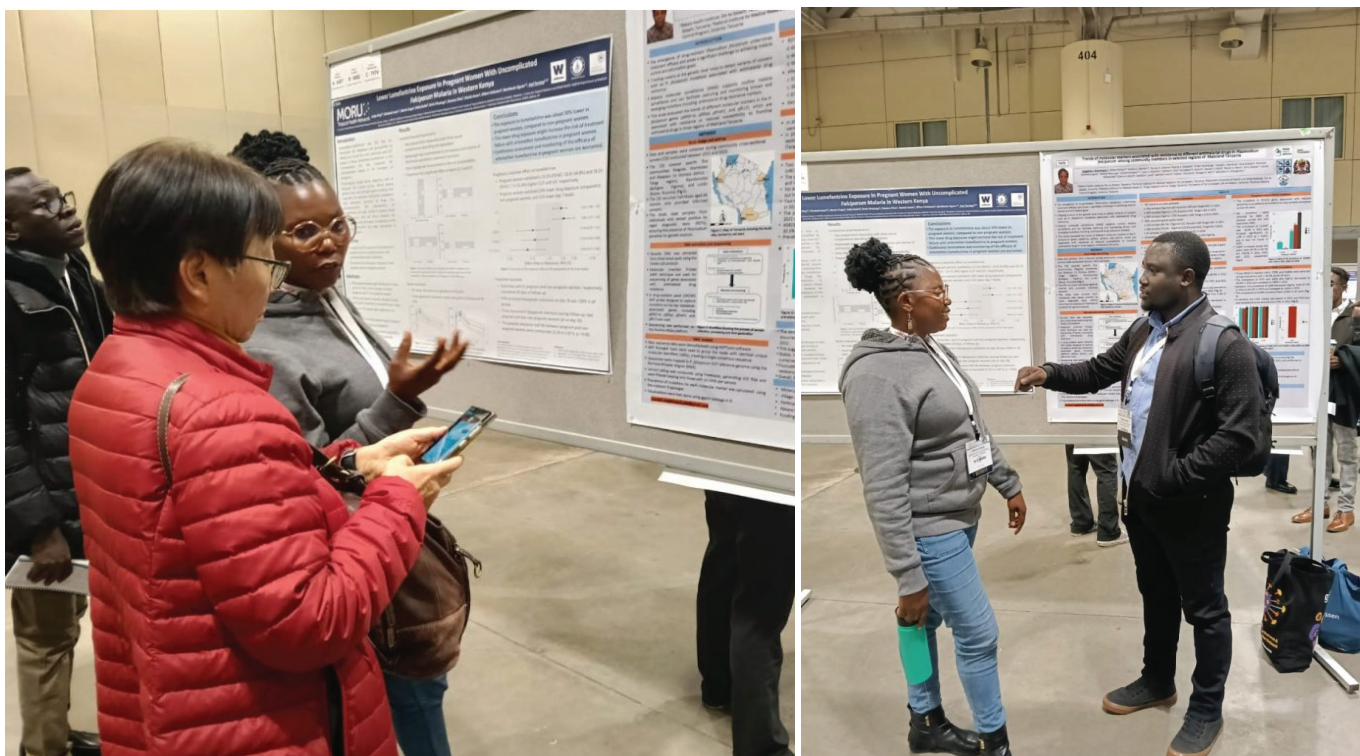
The National Institute for Medical Research (NIMR) continued to strengthen its international profile through active participation in the 2025 Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH).

During the conference, NIMR researchers presented a total of 16 scientific studies, including 13 poster presentations and three oral presentations, showcasing innovative research in the field of tropical diseases. This strong representation highlighted the quality, relevance and global contribution of NIMR's research in generating scientific evidence to advance public health worldwide.

In a notable achievement, Ms Catherine Bakari Mvaa, a PhD candidate at the University of

Basel in Switzerland and a beneficiary of NIMR's MSMT Phase I research project, received the prestigious Professor Dominic Kwiatkowski Fellowship from the Gates Foundation. The award recognized the excellence and scientific impact of her research, reflecting international recognition of NIMR-supported research and capacity building.

The ASTMH Annual Meeting is a leading global forum that brings together scientists and health experts to exchange knowledge and discuss advances in tropical medicine and global health. The five-day conference for this year was held in Toronto, Canada, from 9 to 13 November 2025.



NIMR researchers explain their findings during a poster presentation session at the 2025 Annual Meeting of the American Society of Tropical Medicine and Hygiene (ASTMH), held in Toronto, Canada, following the conference proceedings.

RESEARCH AND POLICY DEVELOPMENTS

NIMR Leads Global Effort to Combat Arboviral Diseases Through the One Health Approach



Participants of the international Arboviral Workshop pose for a group photo at the NIMR Mbeya Centre during the five-day ArbOne project meeting, bringing together experts from Tanzania, Italy and Brazil to advance a One Health approach to combating arboviral diseases.

The National Institute for Medical Research (NIMR) is leading a five-day international Arboviral Workshop at its Mbeya Centre under the project “Arboviral diseases in Brazil, Italy and Tanzania: towards a comprehensive One Health strategy” (ArbOne), funded by the Centre for International Health (CIH-LMU).

The workshop brings together scientists and experts from Tanzania and international partner institutions to strengthen preparedness and response to arboviral diseases using the One Health approach, which integrates human, animal and environmental health perspectives.

Officially opened on 6 October 2025, the workshop is jointly organized by NIMR, the University of Ferrara in Italy, and the University of Espírito Santo in Brazil, with CIH-LMU as the founding partner. During the opening session, the Centre Manager was represented by Mr. Sudi Lwitiho, who reaffirmed NIMR’s commitment to advancing impactful scientific collaboration aligned with global health priorities.

Key presentations by experts, including Prof. Rachel Vicente and Dr. Luciana Stanzani, focused on the epidemiology and ecology of flaviviruses, emphasizing the importance of cross-sector collaboration in addressing emerging and re-emerging arboviral infections.

The initiative is led by Dr. Mkunde Chachage, Principal Investigator and Adjunct Research Fellow at NIMR, with Dr. Wilbert Mbuya serving as Co-Investigator. Through the ArbOne project, NIMR aims to strengthen research capacity, promote scientific collaboration and contribute to resilient public health systems in Tanzania and beyond.



Participants of the international arboviral diseases workshop engage in hands-on practical sessions, strengthening skills to enhance preparedness and response to arboviral threats through the integrated One Health approach linking human, animal, and environmental health..



Participants attentively follow technical presentations during a plenary session of the international Arboviral Workshop at NIMR Mbeya Centre, focused on strengthening One Health–based preparedness and response to arboviral diseases.

NIMR Demonstrates Pioneering Research on Universal Health Insurance at the 12th Tanzania Health Summit

The National Institute for Medical Research (NIMR) showcased its research on Universal Health Insurance during the 12th Tanzania Health Summit (THS), held from 1 to 3 October 2025 at the Julius Nyerere International Convention Centre (JNICC) in Dar es Salaam.

During the summit, the Director of Research Information and Regulatory Affairs (DRIRA), Dr Mary Mayige, presented a paper titled “Leveraging iCHF Data Analysis to Advance Universal Health Insurance and Coverage in Tanzania.” The presentation highlighted joint research conducted by NIMR in collaboration with PharmAccess and the President’s Office – Regional Administration and Local Government (PORALG). She was accompanied by colleagues from NIMR Headquarters Sub-Office, NIMR Muhimbili Centre, and the NIMR Traditional Medicine Research Centre – Mabibo. The ses-

sion was part of the NIMR–PharmAccess joint forum on Universal Health Insurance.

The summit, coordinated by the Ministry of Health, PORALG, the Ministry of Health Zanzibar, APHFTA, CSSC, TMHS and BAKWATA, was held under the theme “Harnessing Data Utilization and Technologies to Accelerate Universal Health Coverage.” The theme emphasized the growing importance of data and digital technologies in improving healthcare access, efficiency and outcomes.

The event brought together national and international experts from academia, Government and the insurance sector, providing a platform to share innovative approaches and evidence-based strategies to support Tanzania’s progress toward achieving Universal Health Insurance for all citizens.



NIMR researchers pose for a group photo during the 12th Tanzania Health Summit at JNICC, Dar es Salaam, following their participation in a joint session on Universal Health Insurance and data-driven health financing solutions.

New Hope for Malaria Treatment: Tanzanian Scientists Lead Groundbreaking Clinical Trial

The National Institute for Medical Research (NIMR) Tanga Medical Research Centre, under Principal Investigator Dr. Samwel Gesase, played a central role in the multi-country, multi-site Phase III KALUMA trial of the novel malaria treatment KLU156 (GanLum), sponsored by Novartis. Conducted at sites in Muheza and Korogwe, Tanzania, the trial enrolled 1,688 patients across 34 sites in 12 African countries. The trial demonstrated that GanLum performs as well or better than the current standard treatment, Artemether-Lumefantrine (Coartem®), achieving a 97.4% cure rate. This positions GanLum as a potential game changer, particularly against malaria parasites showing partial resistance to artemisinin-based therapies (ACTs), a growing threat in Africa including Western Tanzania (Kagera region).

GanLum contains a novel ingredient, ganaplacide, which rapidly kills parasites, including those resistant to artemisinin, and also blocks transmission, helping to reduce community spread. If approved, it would be the first major non-artemisinin-based malaria treatment in over 25 years, offering a new tool to protect Tanzanian families and improve malaria control efforts.

NIMR, Tanzania's leading health research institute under the Ministry of Health, has consistently contributed to malaria control through clinical



trials and evidence-based research. Landmark studies include Aquamat, which informed WHO's shift from Quinine to injectable Artesunate for severe malaria, and trials that guided adoption of ACTs, chemoprevention in pregnancy and schoolchildren (IPTp and IPTsc), and malaria vaccines including RTS,S.

Through collaboration with the National Malaria Control Program (NMCP), local authorities, and international partners, NIMR continues to translate research into practical public health action, enhancing health resilience and policy impact in Tanzania.



NIMR researchers at work inside a laboratory, conducting advanced analyses that support clinical trials and biomedical research aimed at improving malaria treatment and public health outcomes in Tanzania.

Beyond Clinical Surveillance: Wastewater Monitoring Reveals Hotspots of Antimicrobial-Resistant “Superbugs” in Tanzania

A recent study presented during the 7th Africa Continental World Antimicrobial Awareness Week (WAAW) provided critical insights into the environmental reservoirs of antimicrobial resistance (AMR) in Tanzania. Using advanced genomic tools on wastewater and environmental samples collected from Dar es Salaam and Tanga, the study identified circulating AMR genes and hotspots of antimicrobial-resistant “superbugs,” offering a population-level snapshot of the environmental resistome.

Jackson Claver, Head of the Genomics Department at the National Public Health Laboratory (NPHL), noted, “This environmental surveillance approach acts as an early warning tool for public health.” Dr Vito Baraka, Principal Scientist and Lead Investigator in Tanzania, added that wastewater monitoring reflects the health status of communities and provides a complementary tool to traditional clinical surveillance for early detection and targeted interventions.

Dr Eric Lyimo, Co-Investigator, emphasized the transboundary nature of AMR, explaining that resistance genes from farms, hospitals, and households converge in wastewater systems, highlighting the need for a multisectoral One Health approach that integrates human, animal, agricultural, and environmental health.

The study is part of the ODIN project, a multinational initiative funded by the European & Developing Countries Clinical Trials Partnership (EDCTP3). The consortium, including NIMR, NPHL, and partners from the Democratic Republic of Congo, Burkina Faso, Norway, Belgium, the UK, Finland, and Sweden, focuses on advancing genomic wastewater surveillance, building local capacity, and translating pathogen data into actionable public health intelligence. The project provides a scalable model for monitoring AMR across sub-Saharan Africa, ensuring context-specific and validated surveillance tools.



NIMR and Health Stakeholders Convene to Review Implementation of TAKeOFF Project on Lymphatic Filariasis



Participants from NIMR, the Lindi Regional Medical Officer's Office and Lindi Regional Referral Hospital (Sokoine) pose for a group photo during the stakeholders' meeting held to launch Phase II of the TAKeOFF Project, aimed at strengthening control and elimination efforts for lymphatic filariasis in Lindi Region.

The National Institute for Medical Research (NIMR), through the second phase of the TAKeOFF Project, convened a joint stakeholders' meeting on 20 November 2025 with health committees from the Office of the Regional Medical Officer (RMO) – Lindi and the Lindi Regional Referral Hospital (Sokoine) to officially launch Phase II of the project implementation.

The meeting provided a platform to discuss effective strategies for addressing barriers in the control and elimination of lymphatic filariasis and

onchocerciasis in Lindi Region and other affected areas. Participants also reviewed the progress of Phase I and jointly developed strategic priorities for Phase II, focusing on reducing remaining transmission hotspots and improving care for individuals affected by disease-related complications. Opening the meeting, the Acting Regional Medical Officer for Lindi, Dr Enock S. Chilumba, commended NIMR for selecting Lindi as a project implementation site. He noted that during Phase I, more than 4,000 patients with lymphatic

filariasis and onchocerciasis were identified, of whom 3,571 received treatment through the National Neglected Tropical Diseases Control Programme (NTDCP) in collaboration with health partners.

Dr Chilumba further emphasized that NIMR's presence in Lindi has strengthened local capacity in research and contributed to timely evidence generation to improve health service delivery. Similarly, the Medical Officer in Charge of Lindi Regional Referral Hospital – Sokoine, Dr Alexander Makalla, highlighted that the

deliberations would inform the development of key guiding documents for managing patients affected by lymphatic filariasis and onchocerciasis. Speaking during the meeting, the Principal Investigator of the TAKEOFF Project, Dr Akili Kalinga, explained that early engagement of key stakeholders is critical to ensure shared understanding and coordinated implementation. He underscored that Lindi remains among the highly endemic

regions, making intensified efforts under Phase II particularly important. During the meeting, five ongoing research studies under the TAKEOFF Project (2024–2027) were presented. These include clinical trials comparing alternative treatment regimens for lymphatic filariasis, assessments of residual transmission challenges, community-based surveillance and reporting mechanisms, investigations into the

link between neglected tropical diseases and non-communicable diseases, and studies on co-infections associated with filarial-related morbidity. The one-day meeting brought together health stakeholders from the Lindi RMO's office, Lindi Regional Referral Hospital (Sokoine), NIMR researchers, and health professionals, reinforcing collaborative efforts to accelerate the elimination of neglected tropical diseases in Tanzania.



A Major Step Forward in Strengthening Health System Resilience Against Climate Impacts

The DANIDA-funded consortium of multidisciplinary experts has proudly launched an Early Warning System (EWAS) modelling tool designed to predict and prevent outbreaks of malaria and other mosquito-borne diseases driven by climate variability.

This innovative initiative—led by the National Institute for Medical Research (NIMR), State University of Zanzibar (SUZA), and the University of Dar es Salaam (UDSM), in close collaboration with the Ifakara Health Institute, Kilimanjaro Clinical Research Institute (KCRI), the National Malaria Control Programme (NMCP), the Zanzibar Malaria Elimination Programme (ZAMEP), and international partners—integrates a predictive model into Tanzania’s national health system (DHIS2).

The launch represents a significant paradigm shift: moving from reactive response to proactive, data-driven prevention, safeguarding communities, and strengthening sustainable, climate-resilient health systems. By anticipating disease outbreaks before they occur, the tool enhances the capacity of health authorities to implement timely interventions and mitigate the impacts of climate variability on public health.

Sincere thanks and congratulations are extended to all DANIDA–PreVBD project partners, dedicated staff, longstanding collaborators, and everyone who contributed their expertise to this milestone. The launch serves as a powerful testament to collaboration, local leadership, and global partnership in addressing the pressing challenges at the intersection of climate and health.



Participants from NIMR, SUZA, UDSM, KCRI, NMCP, ZAMEP, and international partners pose for a group photo during the launch of the DANIDA-funded Early Warning System (EWAS) modelling tool, marking a major step toward proactive, climate-informed disease outbreak prevention in Tanzania.

TRAINING AND WORKSHOPS

New NIMR Council Trained on Leadership and Good Governance

The newly appointed Council of the National Institute for Medical Research (NIMR) has undergone a three-day training on leadership and good governance from 6 to 8 October 2025 in Dar es Salaam.

The training was organized by the Uongozi Institute in collaboration with the Office of the Treasury Registrar.

The programme aimed to strengthen Council members' understanding of their roles and responsibilities in overseeing public institutions with efficiency, accountability and adherence to the principles of good governance and prudent use of public resources. Participants were equipped with practical approaches to enhancing Council effectiveness, promoting results-oriented

leadership, and strengthening the working relationship between the Council and institutional management.

Council members also gained insights into institutional risk management, public financial management, auditing, public procurement, and overall stewardship of public resources, with emphasis placed on strategic and value-driven utilization of resources for the benefit of citizens.

Through this capacity-building initiative, NIMR expects to further enhance the effectiveness of its Council in fulfilling its oversight role, particularly in ensuring that research outputs contribute meaningfully to evidence-based policies, improved health services and the overall well-being of the community.



Members of the NIMR Council posed for a group photo alongside members of various other institutional boards during the leadership and good governance training held from 6–8 October 2025 in Dar es Salaam.

NIMR Builds Research Writing Capacity Among Temeke Health Workers to Improve Community Health Services



Health workers from Temeke Regional Referral Hospital and facilitators from the National Institute for Medical Research (NIMR) pose for a group photo at the end of a three-day training on research proposal writing, held from 26 to 28 November 2025, aimed at strengthening research capacity to improve community health services.

The National Institute for Medical Research (NIMR), through its Muhimbili Research Centre, conducted a specialized training on research proposal writing for health workers from Temeke Regional Referral Hospital. The three-day training, held from 26 to 28 November 2025, aimed to strengthen participants' capacity to conceptualize, develop, and submit high-quality scientific research proposals.

During the training, participants were exposed to hands-on practical sessions covering key stages of research proposal development. These included designing competitive research proposals, strengthening scientific writing skills, understanding and applying research ethics, and translating professional ideas into impactful research projects with the potential to attract funding. The training also provided a platform for participants to exchange professional experiences and enhance their understanding of conduct-

ing research that generates positive and applicable outcomes.

Speaking at the closing ceremony on behalf of the Director General, the Director of Research Coordination and Promotion (DRCP) at NIMR, Dr Nyanda E. Ntinginya, expressed his appreciation to the leadership of Temeke Regional Referral Hospital for recognizing the importance of the training and ensuring active participation of its staff. He emphasized that the skills acquired should be applied to improve health service delivery through initiating, implementing, and publishing research that directly benefits communities and contributes to national health priorities.

Dr Nyanda further noted that NIMR will continue to strengthen its collaboration with Temeke Regional Referral Hospital in building staff capacity, advancing joint research initiatives, and promoting the use of scientific evidence to inform

and improve health services in Tanzania. The training has sparked renewed optimism among health workers at Temeke, with expectations that it will enhance innovation, competitiveness, and productivity in the development of high-impact research that meaningfully contributes to strengthening Tanzania's health system. Other NIMR participants included Dr Vito Baraka, Principal Scientist and Lead Investigator

of the ODIN project; Dr Eric Lyimo, Co-Investigator of the ODIN project; and Mr. Athanas Mhina, Laboratory Technologist. Numerous other NIMR scientists and experts also actively organized, presented, and facilitated sessions throughout the event, demonstrating the Institute's comprehensive engagement at all levels of the Africa Continental WAAW 2025.



Dr. Nyanda E. Ntinginya, Director of Research Coordination and Promotion (DRCP) at NIMR, addressing participants during the specialized training on research proposal writing for health workers from Temeke Regional Referral Hospital, held from 26–28 November 2025.



"Participants attentively following the research proposal writing training organized by NIMR at Temeke Regional Referral Hospital, aimed at enhancing skills in developing high-quality scientific research proposals.

NIMR Conducts Institutional Review Boards Training to Elevate Clinical Trial Standards Nationwide



Participants from various Institutional Review Boards (IRBs) across Tanzania pose for a group photo at the conclusion of a two-day specialized training organized by NIMR in collaboration with TMDA, aimed at strengthening ethical oversight and regulatory capacity for clinical trials under the TRACE Project.

The National Institute for Medical Research (NIMR) has launched a specialized training programme for members and secretariats of Institutional Review Boards (IRBs) aimed at strengthening national capacity to oversee clinical trials in line with the highest scientific and ethical standards. This marks the second training under the initiative, following an earlier session conducted for clinical trial researchers from 24 to 26 November 2025.

Officially opening the training, the Director General of NIMR, Prof. Said Aboud, stated that the initiative forms part of the national strategy to strengthen Tanzania's clinical research framework at a time when rapid technological advancements and the expansion of health research demand robust ethical and regulatory systems. He emphasized that the training is

designed to enhance the efficiency of IRBs in receiving, analyzing, and reviewing research proposals involving human participants, while ensuring that the rights, safety, and welfare of trial participants are fully protected.

Providing an overview of the training, Dr Obadia Bishoge, Coordinator of the TRACE Project and Deputy Secretary of the National Health Research Ethics Committee (NatH-REC), explained that the initiative is implemented under the TRACE (Trial Regulation and Clinical Ethics Optimization) Project. The project is being implemented in Tanzania, Rwanda, Zimbabwe, and Nigeria with funding from the Gates Foundation, and aims to transform Africa's fragmented and largely manual ethics and regulatory systems into harmonized, efficient, and digitally supported

processes.

Dr Bishoge further noted that TRACE seeks to build capacity for national ethics committees and regulatory agencies, harmonize policies and guidelines in line with regional and international standards, strengthen digital systems such as RIMS and NREIMS to streamline submissions and reviews, and enhance clinical trial oversight through improved Good Clinical Practice (GCP) and Good Clinical Laboratory Practice (GCLP) monitoring, reporting, and inspections. He added that the project also supports IRBs in securing accreditation and strengthening the financial sustainability of ethics review mechanisms.

Prof. Aboud further highlighted that Tanzania's ethics oversight system operates through the coordinated roles of the NIMR Medical Research Coordinating Committee (MRCC), NatHREC, and delegated accredited IRBs at institutional level, ensuring effective ethical oversight from institutional to national platforms.

The two-day training, organized by NIMR in collaboration with the Tanzania Medicines and Medical Devices Authority (TMDA), focuses on strengthening participants' understanding of ethical issues in clinical research, identifying and mitigating potential risks, ensuring fair bene-

fit-sharing, preventing research misconduct, and improving overall quality in the conduct of clinical trials. Participants were drawn from various IRBs across the country and engaged in key thematic areas including an overview of clinical trial regulation and oversight in Tanzania, accreditation requirements and processes for IRECs/IRBs, workflow optimization to reduce review and approval timelines, effective ethical and scientific review of clinical trial protocols, NatHREC standard operating procedures, and the handling of notifications, serious adverse events (SAEs), and suspected unexpected serious adverse reaction (SUSAR) reports.

Participants are expected to return to their institutions with enhanced knowledge and practical skills that will improve integrity, transparency, and efficiency within the national clinical trial ecosystem. The training represents a significant milestone in strengthening a credible, ethical, and globally competitive clinical trial environment in Tanzania.



Director General of NIMR Prof. Said Aboud addressing participants during the opening session of the Institutional Review Boards (IRBs) training, emphasizing the importance of ethical oversight in clinical trials

NIMR Conducts Training to Strengthen Capacity of Clinical Trials Researchers

The National Institute for Medical Research (NIMR), in collaboration with the Tanzania Medicines and Medical Devices Authority (TMDA), conducted a three-day specialized training on 24 November 2025 to build the capacity of clinical trials researchers under the “Trial Regulation and Clinical Ethics Optimization (TRACE) in Africa” project.

In his opening remarks, NIMR Director General, Prof Said Aboud, highlighted that clinical trials are becoming increasingly complex as technology advances, requiring well-trained professionals and robust systems for ethical oversight and research governance.

Prof Aboud emphasized that NIMR is committed to strengthening the national clinical trials framework to meet contemporary scientific needs and international standards.

“These trainings are more than classroom ses-

sions. They incorporate interactive approaches, including practical case studies and scenario analyses, to enhance decision-making, identify ethical gaps, and ensure adherence to research governance requirements,” Prof Aboud added.

The TRACE project aims to achieve four key outcomes: strengthened ethics and regulatory capacity, improved efficiency and speed in clinical trial applications review, enhanced quality in trial management and monitoring, and increased collaboration, access to information, and positive research impact in Tanzania.

Prof Aboud encouraged participants to apply the knowledge gained effectively and return to their institutions as ambassadors of high professional and ethical standards in clinical trials implementation.



Participants from various institutions join NIMR leadership for a group photo during the three-day TRACE training, aimed at strengthening the capacity and ethical oversight of clinical trials researchers in Tanzania.



DISSEMINATION

NIMR Disseminates Impactful Research Findings at the 7th Africa Continental World AMR Awareness Week



NIMR Disseminates Impactful Research Findings at the 7th Africa Continental World AMR Awareness Week

In a milestone event for the African continent, Tanzania hosted the 7th Africa Continental World Antimicrobial Resistance (AMR) Awareness Week (WAAW) at the Hyatt Regency Hotel in Dar es Salaam from 2 to 5 December 2025, reaffirming its strong commitment to combating the growing threat of AMR. The event was held under the theme “Act Now: Protect Our Present, Secure Our Future.” It was officially inaugurated by His Excellency

Ambassador Dr Emmanuel John Nchimbi, Vice President of the United Republic of Tanzania, on behalf of H.E. President Dr Samia Suluhu Hassan. The continental gathering brought together policymakers, research scientists, academicians, youth leaders, and international partners to exchange knowledge, strengthen collaborations, and accelerate actionable solutions to address AMR.

The National Institute for Medical Research (NIMR) played a central role in the success of the week-long continental commemoration. As a member of the National Multisectoral Coordi-

nating Committee on AMR and part of the event's organizing committee, NIMR contributed significantly to shaping the programme, coordinating scientific sessions, and driving discussions that effectively bridged policy, science, and practice.

NIMR research scientists presented ten key studies addressing both clinical and environmental dimensions of antimicrobial resistance. Highlights included studies on wastewater and environmental surveillance for pathogen detection and AMR gene profiling in Tanzania; molecular characterization of extended-spectrum beta-lactamase-producing *Klebsiella pneumoniae* among children and chickens in Korogwe District; prevalence, diagnostic accuracy, and antimicrobial resistance patterns of uropathogens at Ngamiani Health Centre in Tanga; antimicrobial resistance profiles of ESKAPE pathogens isolated from clinical samples in Tanga City; laboratory-based surveillance of antimicrobial resistance in urinary tract pathogens at Bombo Regional Referral Hospital in Tanga Region; and the prevalence of multidrug-resistant *Salmonella typhi* isolated from blood samples at selected health facilities in Korogwe District.

Additional presentations showcased both environmental and hospital-based surveillance efforts, including studies on multidrug-resistant bacterial contamination on frequently touched surfaces in public transport systems in Tanga City, molecular epidemiolo-

gy and antimicrobial resistance of extended-spectrum beta-lactamase-producing *Enterobacter cloacae* complex in neonatal units in Tanga, and emerging antimicrobial resistance among bloodstream infections at Tanga Regional Referral Hospital and Ngamiani Health Centre from 2023 to 2025. The EXPAND-AMR study, led by Professor John Lusingu, Principal Investigator at NIMR Tanga, provided critical insights into the overdiagnosis of urinary tract infections and associated antibiotic resistance, demonstrating practical strategies to improve diagnostics and treatment outcomes.

Through its active engagement, NIMR reinforced the One Health approach by integrating human, animal, agricultural, and environmental health perspectives, while delivering evidence-based recommendations aimed at protecting Tanzania's antibiotic resources. By showcasing scientific leadership and strategic direction, NIMR continues to strengthen Tanzania's position at the forefront of AMR research, policy development, and continental collaboration.

The event underscored that addressing AMR requires strong laboratory systems, accurate diagnostics, evidence-based treatment, and integrated One Health strategies. NIMR remains committed to translating research evidence into actionable policies that safeguard public health in Tanzania and across Africa.



PhD AWARDS

Congratulations

Dr. Stella Kilima On your PhD Award

PhD Title: Social and Economic Consequences of Pulmonary Tuberculosis — Perspectives of Patients, Their Families, the Community, and Health Care Providers in Mbeya and Songwe Regions, Tanzania.

Supervisors: Prof. Denise Evans, Dr. Godfrey Mubyazi and Dr. Aneesa Moolla

Institution: University of the Witwatersrand, Johannesburg, South Africa

Graduation Date: 9 December, 2025

The Council, Management, and Staff Congratulate you on this Great achievement, and may this success open new doors of impact, opportunity, and advancement in your Professional career.

With appreciation to the TB Sequel Project (PI: Dr. Nyanda Ntinginya) for supporting your studies.



Congratulations

Dr. Charles Makasi
On your successful PhD defence

Title: Epidemiology, Diagnostic Performance, and Clinical-Radiological Characteristics of Taenia solium Neurocysticercosis and the Influence of HIV Co-infection in Tanzania

Institution: Kilimanjaro Christian Medical University College (KCMUCo)

Defence Date: 19 November 2025

The Council, Management, and Staff congratulate you on this remarkable achievement. We wish you every success in your research and innovation endeavors.

Special thanks to the CYSTINET Africa Project for sponsoring your studies.



AWARD

The National Institute for Medical Research (NIMR) Mwanza Centre has received the Customer of the Year Award from the Mwanza Urban Water Supply and Sanitation Authority (MWAUSA) in recognition of its accountability and timely payment of water bills. Congratulations to the NIMR Mwanza team for continuing to demonstrate integrity, responsibility, and strong collaboration with stakeholders.



Congratulations to NIMR Mwanza

PUBLICATIONS

1. Ahmed R, Mulupi S, Taegtmeier M, Ardrey J, Devereux G, Chinouya M, Osman R, Hussein E, Modawey S, Eltahir H, Waithera C, Meme H, Shayo EH, El Sony A, Tolhurst R. "People here live in denial": A qualitative study of the pervasive impact of stigma on asthma diagnosis and care in Kenya and Sudan. *PLOS Global Public Health* 2025. <https://doi.org/10.1371/journal.pgph.0001234>
2. Damian DJ, Cosmas SG, Wang A, Kagashe M, Haji A, et al. COVID-19 Vaccination in Adults: Results from the Tanzania HIV Impact Survey 2022–2023. *Vaccines* 2025. <https://doi.org/10.3390/vaccines13112345>
3. Visiy EB, William TA, Bishoge OK, Maineh NN, Théophile F. Current Practices and Challenges in Constructed Wetlands for Wastewater and Fecal Sludge Treatment in Cameroon: A Critical Review. *Environmental Quality Management* 2025. <https://doi.org/10.1002/tqem.12345>
4. Sukums F, Ngowi B, Chaula R, Weiszhar KL, Kalinga A et al. Experiences of health research data sharing among researchers in Sub-Saharan Africa: a cross-sectional study (Preprint). *JMIR Formative Research* 2025. <https://doi.org/10.2196/34567>
5. Mosoba M, Marandu TF, Maganga L, Mhidze J, Mahenge A et al. Impact of *Wuchereria bancrofti* Infection on Cervical Mucosal Immunity and Human Papillomavirus Prevalence in Women from Lindi and Mbeya Regions, Tanzania. *Tropical Medicine and Infectious Disease* 2025. <https://doi.org/10.3390/tropicalmed10012345>
6. Challe DP, Francis F, Seth MD et al. Prevalence and risk factors associated with infections caused by *Plasmodium* parasites at micro-geographic level in three villages of Muheza district, Tanga region, Tanzania. *Malaria Journal* 2025 ; 24:312. <https://doi.org/10.1186/s12936-025-05506-3>
7. Nambiema A, Agboyibor KM, Dangou JM, Antignac M, Diallo CB et al. Prevalence, Awareness, and Treatment of Hypertension in 37 African Countries. *JACC* 2025. <https://doi.org/10.1016/j.jacc.2025.08.001>
8. Chacha GA, Seth MD, Mandai SS, Petro DA, Challe DP et al. Socio-demographic predictors of insecticide-treated bed net ownership and utilization in five regions of Mainland Tanzania. *MedRxiv* 2025. <https://doi.org/10.1101/2025.10.03.123456>
9. Sulola MA, Sibai A, Damasceno A, Issanov A, Sarria-Santamera A et al. Use of traditional-medicine for hypertension, diabetes, and hypercholesterolaemia measured in 71 surveys. *Bulletin of the World Health Organization* 2025. <https://doi.org/10.2471/BLT.25.123456>
10. Marambire ET, Calderwood CJ, Larsson L, Malhotra AM, Madziva K et al. Association of HIV and *Mtb* infection among household contacts in East and Southern Africa. *The International Journal of Tuberculosis and Lung Disease* 2025. <https://doi.org/10.5588/ijtld.25.12345>
11. Assebe LF, Bashir S, Malhotra A, Elísio D, Machiana A et al. Benefit incidence analysis of decentralized Truenat MTB Plus and MTB-RIF Dx compared to hub-and-spoke Xpert MTB/RIF in Mozambique and Tanzania (TB-CAPT CORE trial). *PLOS One* 2025. <https://doi.org/10.1371/journal.pone.0251234>
12. Khosa C, Cossa M, Leukes V, Hella J, Sabi I et al. Implementing the Molbio Truenat platform and TB assays versus standard care at primary clinics in Mozambique and Tanzania (TB-CAPT CORE): a cluster-randomized trial. *The Lancet Primary Care* 2025. [https://doi.org/10.1016/S0140-6736\(25\)12345-6](https://doi.org/10.1016/S0140-6736(25)12345-6)

13. Kilima S, Hirasen K, Mubyazi G, Moolla A, Ntinginya N et al. Implications of pre-diagnosis costs incurred by patients and their families for tuberculosis-related health-seeking behaviors in Mbeya and Songwe regions, Tanzania. *PLOS One* 2025. <https://doi.org/10.1371/journal.pone.0256789>
14. Gieselmann L, DeLaitsch AT, Rohde M, Gruell H, Kreer C et al. Profiling of HIV-1 elite neutralizer cohort reveals a CD4bs bnAb for HIV-1 prevention and therapy. *Nature Immunology* 2025. <https://doi.org/10.1038/s41590-025-1234-5>
15. Lukole EA, Gobin S, Cook J, Charlwood JD, Mosha JF et al. Acceptability and preferences for dual-active ingredient long-lasting insecticidal nets in rural Tanzania: a mixed-methods study. *Malaria Journal* 2025. <https://doi.org/10.1186/s12936-025-05678-9>
16. Bakari M, Suleiman F, Mwangi E, Mhando A, Komba JL et al. Genomic characterization of multidrug-resistant *Mycobacterium tuberculosis* strains in Tanzania. *BMC Genomics* 2025. <https://doi.org/10.1186/s12864-025-12345>
17. Mushi RN, Wakapesa BK, Mosha DS, Mboya MH, Masenza IS. HIV-1 drug resistance patterns in ART-experienced adults in Mwanza region, Tanzania. *Journal of Antimicrobial Chemotherapy* 2025. <https://doi.org/10.1093/jac/dkaa123>
18. Mshana HJ, Minja CN, Kweka JS, Mtasiwa AF, Nnko SA. Malaria transmission dynamics in urban and rural areas of Mwanza, Tanzania: a longitudinal cohort study. *Malaria Journal* 2025. <https://doi.org/10.1186/s12936-025-05678-0>
19. Lyimo ES, Masanja FT, Mgaya NJ, Mfinanga ZP. Tuberculosis and co-morbidities: prevalence and management challenges in Tanzania. *BMC Public Health* 2025. <https://doi.org/10.1186/s12889-025-12345-6>
20. Mahundi AR, Challe DP, Kitua RC, Manjurano JM. Impact of insecticide-treated nets on malaria prevalence in under-five children in Tanga and Mwanza regions. *Acta Tropica* 2025. <https://doi.org/10.1016/j.actatropica.2025.106789>
21. Rwechungura BJ, Mushi SJ, Lyimo EL, Ngalesoni FH. HIV prevention uptake and adolescent health outcomes in Tanzania: evidence from national surveys. *PLOS Global Public Health* 2025. <https://doi.org/10.1371/journal.pgph.0001245>
22. Juma MS, Suleiman AM, Mwanga PK, Mfinanga EC. Community perceptions and acceptability of COVID-19 vaccination in Tanzanian regions. *Vaccine* 2025. <https://doi.org/10.1016/j.vaccine.2025.09.123>
23. Mshana MG, Mosha BJ, Guriani AS, Lyimo EK. Detection of antimicrobial-resistant bacteria in hospital wastewater in Tanzania. *Frontiers in Microbiology* 2025. <https://doi.org/10.3389/fmicb.2025.012345>
24. Shayo NA, Mfinanga SJ, Ngare H, Ikaeli F. Evaluation of laboratory capacity for diagnosis of neglected tropical diseases in Tanzania. *Tropical Medicine & International Health* 2025. <https://doi.org/10.1111/tmi.13567>
25. Msemo AJ, Shayo BJ, Lyimo EA, Masenza IS. Genomic diversity of *Plasmodium falciparum* in high and low transmission settings in Tanzania. *Malaria Journal* 2025. <https://doi.org/10.1186/s12936-025-05679-1>
26. Haji FM, Masenza IS, Lyimo EK, Mfinanga SJ. Prevalence of anemia and associated risk factors among under-five children in Mwanza region, Tanzania. *BMC Pediatrics* 2025. <https://doi.org/10.1186/s12887-025-012345>

27. Mfinanga ZP, Lyimo EA, Filbert D, Ikaeli F. Innovative approaches to malaria vector control in Tanzania: lessons from pilot studies. *Parasites & Vectors* 2025. <https://doi.org/10.1186/s13071-025-05432>
28. Khamis KS, Kitua RC, Guriani AS, Lyimo E. HIV drug resistance surveillance among ART-naïve and ART-experienced adults in Tanzania. *AIDS Research and Therapy* 2025. <https://doi.org/10.1186/s12981-025-00456>
29. Mboya GS, Mbogho JA, Lyimo EK, Ngare H. Epidemiology and risk factors for hypertension in adults in Mwanza, Tanzania. *BMC Cardiovascular Disorders* 2025. <https://doi.org/10.1186/s12872-025-01456>
30. Chacha MG, Lyimo EA, Mgaya NJ, Masenza IS. Determinants of adherence to tuberculosis treatment among adults in Mwanza region, Tanzania. *PLOS One* 2025. <https://doi.org/10.1371/journal.pone.0267890>
31. Filbert D, Ikaeli F, Lyimo EK, Ngare H. Laboratory evaluation of diagnostic assays for malaria and tuberculosis in Tanzanian reference labs. *BMC Infectious Diseases* 2025. <https://doi.org/10.1186/s12879-025-01234>
32. Mbogho AW, Rwechungura BJ, Lyimo EL. Community awareness and prevention practices against vector-borne diseases in Mwanza, Tanzania. *Frontiers in Public Health* 2025. <https://doi.org/10.3389/fpubh.2025.01234>
33. Mfinanga S, Lyimo EK, Guriani A, Ikaeli F. Integration of HIV, TB, and NCD services in Tanzanian primary healthcare facilities: successes and challenges. *Global Health Action* 2025. <https://doi.org/10.1080/16549716.2025.01234>
34. Musin JC, Lyimo EL, Ngare H, Filbert D. Digital health interventions for improving ART adherence in Tanzania: pilot study outcomes. *JMIR mHealth and uHealth* 2025. <https://doi.org/10.2196/34567>
35. Ikaeli F, Lyimo EK, Filbert D, Ngare H. Nutritional status and non-communicable disease risks among adults in Mwanza region, Tanzania. *BMC Nutrition* 2025. <https://doi.org/10.1186/s40795-025-01234>
36. Malewo B, Lyimo EK, Mfinanga S. Capacity building of Tanzanian laboratories for clinical trials and infectious disease research. *PLOS Global Public Health* 2025. <https://doi.org/10.1371/journal.pgph.0001246>
37. Guriani A, Lyimo EL, Ikaeli F, Filbert D. Evaluation of malaria rapid diagnostic test performance in high-transmission settings of Mwanza, Tanzania. *Malaria Journal* 2025. <https://doi.org/10.1186/s12936-025-05680-5>
38. Ngare H, Ikaeli F, Filbert D, Lyimo EK. Community-based approaches to improving vaccine uptake in Mwanza, Tanzania. *Vaccine* 2025. <https://doi.org/10.1016/j.vaccine.2025.10.123>
39. Lyimo EK, Ikaeli F, Dorin Filbert, Hussen Ngare. (2025). One Health approach in disease surveillance and outbreak response in Tanzania. *One Health*. <https://doi.org/10.1016/j.onehlt.2025.100456>
40. Moyo SJ, Manyahi J, Aboud S, Mørch K, Roberts AP, Blomberg B, Langeland N. Extended-spectrum- β -lactamase-producing Gram-negative bacteria are associated with high mortality in children with bloodstream infections in Dar es Salaam, Tanzania. *BMC Infect Dis.* 2025 Oct 27;25(1):1416. doi: 10.1186/s12879-025-11629-4.

41. Ambikile JS, Tarimo EAM, Iseselo MK, Lukumay G, Munseri P, Bakari M, Lyamuya E, Aboud S, Kawuma R, Seeley J. The experience of trial participation disclosure among sex workers in a phase IIb HIV vaccine trial: A qualitative study in urban Tanzania. *PLOS Glob Public Health*. 2025 Nov 19;5(11):e0005511. doi: 10.1371/journal.pgph.0005511.
42. Kheir KR, Ally MS, Mpatani FM, Kombo UM, Juma HB, Matano MM, Ismail SR, Khamis KA, Ame AM, Rashid RG, Kombo KM, Ali TA, Kafuye MY, Ali AM, Khamis BB, Ahmada SA, Juma BS. Ethnobotanical survey of medicinal plants and practice of traditional healers in North Pemba Region of Zanzibar. Implications for sustainable use and conservation. *Acta Botanica Plantae* 2025 November;4(3):78-85.
43. Goodman RN, Moyo SJ, Memelis I, Khanijau A, Manyahi J, Kibwana UO, Aboud S, Blomberg B, Langeland N, Roberts AP. Comparative genomics of blood and faecal *E. coli* and *K. pneumoniae* isolates from neonates with bloodstream infections in Tanzania. *Commun Biol*. 2025 Nov 18;8(1):1603. doi: 10.1038/s42003-025-09008-5

POLICY BRIEFS

1. Social and economic consequences of pulmonary tuberculosis ,À perspectives of patients, their families, the community, and health care providers who care for TB patients in Mbeya and Songwe regions, Tanzania.- Dr Stella Kilima
2. The Youngest Line of AMR Defence; Antimicrobial stewardship training in elementary schools in Tanzania - Dr Calvin Kimaro



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