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MILK CENTRE NEWSLETTER



Prof. Catriona Waitt Awarded Prestigious NIHR Global Health Research Professorship

The MILK-CENTRE team is delighted to celebrate a major milestone as our team lead Prof Catriona Waitt has been awarded a prestigious National Institute for Health and Care Research (NIHR) Global Health Research Professorship. The award recognises outstanding researchers leading ambitious programmes that address global health priorities while strengthening research leadership and capacity in low- and middle-income countries.

The Professorship will support the implementation of the Maternal and Infant Lactation pharmacoKinetics Centre of Excellence for lactatioN Therapeutics Research and Engagement (MILK-CENTRE), a landmark initiative being delivered through a partnership between the University of Liverpool and the Infectious Diseases Institute, Makerere University in Uganda. Building on more than a decade of collaborative research, MILK CENTRE aims to generate high-quality evidence on the safe and effective use of medicines during breastfeeding. In this area, critical knowledge gaps continue to affect healthcare decisions for mothers and infants worldwide.

Breastfeeding women are frequently excluded from clinical research, leaving clinicians and families with limited evidence to guide treatment decisions. Through the NIHR Professorship, Prof. Waitt will lead a multidisciplinary programme that combines clinical pharmacology, pharmacometrics, laboratory science, public engagement and policy translation to improve medicine safety during lactation. The Centre will also strengthen research infrastructure, build scientific capacity, foster collaborations with industry and policymakers, and position Uganda as a global leader in lactation pharmacology research.

Reflecting on the award, Prof. Waitt noted that breastfeeding mothers who require medication often lack the evidence needed to make informed decisions for themselves and their babies. She emphasised that the new Professorship will build on years of research and partnerships in Uganda to establish a globally recognised centre of excellence capable of responding to emerging health priorities while generating evidence that improves care for mothers and infants.

For the MILK-CENTRE team and its partners, this achievement represents far more than individual recognition. It marks an important investment in African research leadership, capacity strengthening and equitable global health partnerships. The award reinforces the Centre's vision of ensuring that no mother has to choose between receiving essential treatment and continuing to breastfeed because of a lack of evidence.

The entire MILK-CENTRE community congratulates Prof. Catriona Waitt on this remarkable achievement and looks forward to the transformative impact the NIHR Global Health Research Professorship will have on research, policy and the health of mothers and infants around the world.

Building Research with Communities, Not Just for Communities

Research has the greatest impact when it reflects the realities of the people it is intended to serve. For the Maternal and Infant Lactation pharmacoKinetics: Centre of Excellence for LactatioN Therapeutics Research and Engagement (MILK-CENTRE), this means building research with communities, not simply for them.

This commitment was demonstrated during the two-day Community and Civil Society Priority Setting Workshop in Gulu, where breastfeeding mothers, community leaders, civil society organizations, disability advocates, healthcare professionals, and researchers came together to shape future maternal health research.

Using an adapted nominal group technique, participants shared lived experiences, identified challenges women face after childbirth, and worked with researchers to determine the most important research priorities. Discussions explored issues ranging from maternal sepsis and safe medicine use during breastfeeding to barriers to healthcare access and the often-overlooked burden of postpartum depression. These conversations highlighted the social, cultural, and health system factors that influence maternal health alongside clinical evidence.



The MILK CENTRE priority setting workshop in Gulu

The workshop created a valuable exchange between scientific knowledge and community experience. Presentations on maternal sepsis, breastfeeding, medicine safety, and postpartum mental health provided participants with evidence to inform discussions, while community members contributed practical insights and local perspectives that enriched the research process.

Together, participants ranked priority research areas, identifying early recognition and treatment of maternal sepsis, safe medicine use during breastfeeding, improved communication between healthcare providers and mothers, greater awareness of postpartum depression, and expanded access to counselling and psychosocial support as key priorities.

The workshop reaffirmed that communities are essential research partners. By engaging them early in setting priorities, the MILK CENTRE ensures future studies address community needs and generate evidence that improves the health and wellbeing of mothers and infants.

The priorities identified in Gulu will now inform the broader MILK CENTRE research agenda, helping shape research that is more inclusive, relevant, and responsive to the communities it serves.

Shaping the Future of Drug Research

The future of medicine is increasingly driven by data, mathematics, and innovative modelling. To equip researchers with these emerging skills, the MILK PBPK team at the Infectious Diseases Institute (IDI) conducted a two-day workshop on Quantitative Pharmacology and Physiologically Based Pharmacokinetic (PBPK) Modelling, hosted by Gulu University.

The workshop brought together academic scientists, clinicians, postgraduate students, and early-career researchers from Gulu University, Lira University, and Muni University to highlight the basic concepts of PBPK and showcase their applications in understanding drug exposure relationships in research and patient care. In particular, the workshop emphasized quantitative pharmacology as a fast-growing field that offers enormous career opportunities for upcoming researchers.

Opening the workshop, Francis Williams Ojara highlighted the growing importance of quantitative pharmacology in modern healthcare and the need to build local expertise in Uganda. He encouraged participants to view the training as a foundation for strengthening research capacity and advancing evidence-based therapeutic decision-making.

PBPK Physiologically Based Pharmacokinetic modeling. It is a mathematical technique used in pharmacology and toxicology to predict how a drug or chemical is absorbed, distributed, metabolized, and excreted (ADME) in the body.



Joshua Kiptoo, Francis Ojara, Davies Otieno, and Henry Enzama as they facilitated their respective sessions

The programme began with an introduction to pharmacology by PhD Scholar Joshua Kiptoo, who covered the fundamentals of pharmacokinetics (PK), pharmacodynamics (PD), and the importance of understanding how medicines move through and act within the body.

Building on this foundation, Francis Williams Ojara introduced PBPK modelling, demonstrating how mathematical models integrate human physiology and drug characteristics to predict medicine behaviour in different populations. Participants also explored nonlinear mixed-effects (NLME) modelling, model-informed drug development, extrapolation techniques, and the application of these approaches in special populations, including pregnant and breastfeeding women.

Hands-on practical sessions introduced participants to pharmacometric software, allowing them to build basic PBPK models and apply theoretical concepts to real-world research scenarios. Beyond technical learning, the workshop fostered collaboration among researchers from Northern Uganda, creating opportunities for networking, interdisciplinary research, and future training.

By investing in quantitative pharmacology and pharmacometrics, MILK-CENTRE is helping develop a new generation of Ugandan scientists equipped to lead research that improves medicine safety, supports precision medicine, and delivers better health outcomes for mothers, infants, and communities.

Co-creating Solutions to Reduce Maternal Sepsis in Uganda

The EMpower and Build, Equip and Disseminate the Active Prevention and Treatment of Maternal Sepsis (EMBED-APT) project is ensuring that life-saving maternal sepsis research reaches the communities where it can have the greatest impact.

Building on the success of the Active Prevention and Treatment of Maternal Sepsis (APT-Sepsis) trial, which demonstrated a 32% reduction in maternal sepsis-related mortality and severe morbidity, EMBED-APT is translating evidence into action through community partnership, co-creation and dissemination.

A key milestone was a co-creation workshop held in Hoima in February 2026, where Village Health Teams (VHTs), healthcare workers, and the Attaining Equity of Access To Research (At The EQUATOR) team from IDI came together to develop culturally appropriate information, education and communication (IEC) materials on maternal sepsis. Their knowledge and lived experiences helped shape messages that are relevant, practical, and easy for communities to understand.



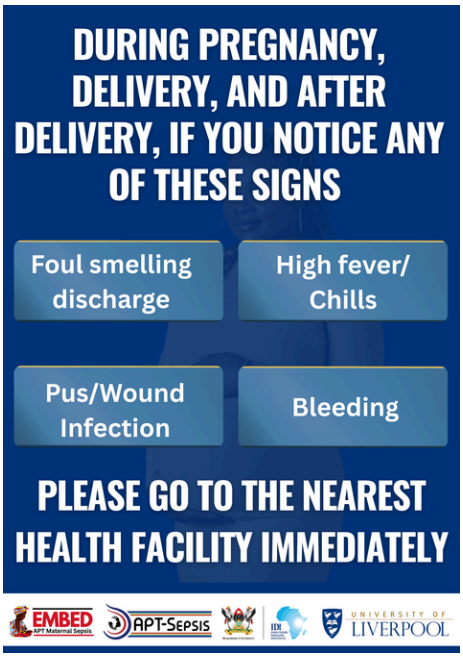
Adelline Twimukye, Peace Okwaro, and Prisca Abitimo during the co-creation workshop

In June, the project team returned to Hoima to disseminate the co-created IEC materials. The dissemination was led by the VHTs at their respective health facilities, with support from the At The EQUATOR team. By placing trusted community health workers at the forefront of the campaign, the project strengthened local ownership and ensured that key messages on preventing, recognising and seeking timely treatment for maternal sepsis reached women and families in accessible ways.

The EMBED APT project also supports wider knowledge sharing through information, education and communication (IEC) materials and capacity-strengthening activities that empower Ugandan researchers and healthcare professionals to communicate evidence and influence future maternal health programmes. Various posters with different messages were developed with the VHTs and health workers, and translated into Runyoro to ensure the information is accessible to the people at the grassroot.







Some of the posters developed during the co-creation

EMBED-APT demonstrates that meaningful community engagement is essential for translating research into lasting health impact. By working alongside communities and frontline health workers, the project is helping ensure that evidence moves beyond publications to become knowledge that saves mothers' lives.



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