

**2025**

# 5TH ANNUAL **RESEARCH DAY**

**21/03/2025**



## ITINERARY

Event starts at 7 am (Tea will be provided.).  
Raffle prize drawing for all who arrive on time  
Prize for best poster

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20 Kijabe, Kenya

## Welcome Note

Welcome to the 5th Annual Kijabe Research Day, a day dedicated to recognize and celebrate all the ways Kijabe Hospital is advancing the conversation on improving the quality of care, developing training for health care workers, and utilizing local data to address health care needs on the continent.

### Come Learn About

**WHO** is doing research and quality improvement work at Kijabe.

**WHAT** type of things are they doing.

**HOW** to get involved in getting answers to questions that matter to you.

The poster presentations at Kijabe Research Day are designed to showcase ongoing work and provide a learning opportunity for everyone, including consultants, trainees, residents, and staff from various departments including clinical, nursing, finance, human resources, housekeeping, security, and the Kijabe College of Health Sciences.

**Poster Presentations will have 5 thematic tracks, these include;**

Recently published work

Completed research projects

Quality Improvement Projects

Medical education and training programs

Work in progress (both quality improvement and research focused)

**The best category from each thematic group, excluding published work, will receive an award! This is your opportunity to stand out and be recognized for your excellence!**

# Research Day Program

Time	Event	Facilitator
7:00am-7:05am	<b>Prayer/Opening Ceremony</b>	Dr. Arianna Shirk
7:05am -7:10am	<b>Introduction to Kijabe Research Department</b>	Dr. Mary Adam
7:10am-7:15am	<b>Snooze You Loose Raffle Award</b>	
7:15am-8:00am	<b>Oral Presentations</b> (3 presentations)	
8:00am-8:30am	<b>Celebrities Interview</b>	Dr. Arianna Shirk
8:30am-10:30am	<b>Poster Judging</b> <b>[Stand next to your poster: MEB 2nd and 3rd Floor ]</b>	Invited Guests Research Celebrities
12:30 -1:30 pm	<b>Lunch time interactions for thematic groups discussion</b>	
	<b>Playing By the Rules: Research Grant Compliance for The Uninitiated, Build a Scorecard for Success</b> Journey into the jungle of research grant due diligence and grant compliance. Learn why what you don't know really can eat you alive.	Prof. Dana Brown Dr. Miriam Njoki Alice Osiemo
	<b>Making Research Collaborations Work for You: The Ins and Outs of Authentic Partnerships</b> Research partnerships are evolving to become more equitable, with momentum moving to the global south. Learn about what constitutes true partnership and how to co-design processes with partners that demonstrate true mutual exchange of ideas, skills, and funding.	Prof. Sam Kinyanjui Dr. Magid Twahir Dr. Cyrus Mugo Dr. Macharia Chege
	<b>Nurses: We Do Research</b> Meet nurses doing research and hear about their journey. See how and in what different ways you can do it too!	Prof. David Gathara Dr. Peris Kiarie Gladys Mutisya
	<b>Bugs vs. Drugs: Rallying the Hospital Team to Win the War Against Antimicrobial Resistance</b> Antimicrobial stewardship is essential for patient safety and the fight against drug-resistant infections. In this session, learn why it's here to stay and how you can implement effective strategies in your own practice. Gain insights from experts who are leading the charge in combating antimicrobial resistance.	Prof. Rodney Adam David Odada Dr. Belyse Arakaza
1:30pm-1:35pm	<b>Awarding Best Posters</b>	Invited Guests
1:35pm – 1:50pm	<b>Share a Cake and Closing Ceremony</b>	Dr. Chege Macharia Dr. Arianna Shirk Dr. Peris Kiarie
<b>Note: Posters will be available for viewing the whole day</b>		

## Our Guests



### **Prof. Samson Kinyanjui, PhD**

Prof. Kinyanjui is the Head of Training and Capacity Building at the KEMRI-Wellcome Research Programme. He is also the Director of the Initiative to Develop African Research Leaders (IDeAL), and an Associate Professor at the Nuffield Department of Medicine, Oxford University. Prior to his current position Prof. Kinyanjui focused on malaria immunology but over the last 18 years his focus has been on building local capacity for health research in Africa. During this period, he raised and managed over \$42 million for capacity building as the primary recipient and over \$40 million as a co-recipient. With this fund he has supported high-quality research training for over 1000 individuals including over 150 PhD, more than 260 Master and nearly 400 undergraduate and graduate interns. Prof. Kinyanjui has also led the establishment of several Postgraduate Diploma, Masters and PhD programmes in Universities in Kenya and the UK. For his efforts, Prof. Kinyanjui has received several local and global accolades including the 2019 Royal Society of Tropical Medicine and Hygiene (UK) Chalmers Medal and the KEMRI Director award for outstanding contribution to science and leadership in 2020. He also sits on the advisory boards and management committees of many research and capacity building consortia in Africa.



### **Prof. Rodney D. Adam**

Rodney Adam is an Infectious Disease Specialist with over 35-year work experience. He received his MD degree at the University of Illinois, USA in 1981 and his BA in Mathematics, Chemistry and Biology at Trinity International University, USA in 1976. He completed his training in Internal Medicine and Infectious Diseases as well as laboratory training in Molecular Parasitology before joining the University of Arizona College of Medicine faculty. He joined the department of pathology at Aga Khan University Hospital in 2012 where he has been working in the Microbiology section with a focus on molecular diagnostics, especially related to the diagnosis of infectious diseases. His current research interests include hospital-acquired infections and their prevention. Prof. Adam is interested in the correlation of the intestinal microbiota with a variety of adverse outcomes.



### **Dr. Cyrus Mugo, MBChB, MPH, PhD**

Dr Mugo is a senior research scientist at Kenyatta National Hospital. He has over ten years of experience in clinical/public health research, clinical practice, and training in the delivery of health services. He has also received training in medicine, global health, epidemiology, and implementation science. Dr Mugo is experienced in designing & managing research projects in HIV prevention, testing, treatment and treatment support, and infectious disease surveillance in Kenya and Nigeria. Highlights of his research work include studies on index case testing for the children and adolescents, implementation strategies for community roll-out of HIV self-testing among adolescents in Kenya, development of tools to guide transition of adolescents from pediatric to independent care; these studies directly informed HIV testing and treatment guidelines and policies in Kenya. Currently he is undertaking studies assessing social factors in adolescent HIV. He has more than 45 publications in high impact journals. Beyond grant writing, He is involved in mentorship of junior researchers at KNH and research project staff affiliated with KNH.



### **Prof. Dana Brown MBChB, MMed, PHD**

Dr. Dana Basnight-Brown is a cognitive scientist whose primary research focuses on the cognitive processes surrounding human memory, emotion, and language, particularly within the domain of multilingual communities. For over a decade, she served as an Associate Professor at the United States International University – Africa (USIU) in Nairobi, Kenya. She established the first research laboratory dedicated to the study of human cognition in East Africa and served as the principal investigator (Centre for Cognitive and Developmental Research at USIU). She is a founding board member and former Associate Director of the Psychological Science Accelerator (PSA), one of the largest team science initiatives in the behavior sciences worldwide. This grassroots research effort currently consists of several thousand researchers representing labs in 73 countries. To date, the PSA has completed roughly a dozen behavioral science projects that cover topics related to effectively communicating health messages to the public during the COVID-19 pandemic (N > 15,000 participants), facial perception (N > 11,000 participants), and moral dilemma judgments across countries. They have been recognized by various international outlets and received the Einstein Foundation Award for Promoting Quality in Research. Currently, Dana serves as an Associate Editor at Memory and Cognition. Dr. Basnight-Brown earned a BS degree in Molecular Biology (minor in Chemistry) and a BA degree in French (minor in Spanish), followed by MA and PhD degrees in Cognitive and Developmental psychology. More recently, she earned an MS in Research Administration from Johns Hopkins University. She has more than 45 articles published in peer-reviewed journals (H index = 24, ~ 3,000 citations) and has supervised numerous Masters and Doctoral students in Kenya. She has been invited to present her research in spoken sessions internationally, including on five continents and in more than one dozen countries. She is passionate about open scholarship in African research and in the research ethics surrounding multi-country research collaborations.



### **Dr. Majid S. Twahir**

Dr. Majid Twahir currently works as a Senior Lecturer at the Strathmore University Business School in the Institute of Healthcare Management. Over the last 30 years, Majid has worked between University of Nairobi and Aga Khan University starting as an Assistant lecturer to becoming an Associate Dean. He has simultaneously also worked in the healthcare industry starting from a junior doctor to hospital leadership. Majid has a Doctorate in Business Administration from United States International University (USIU-A) and a Master of Business Administration (Strategy) from Strathmore Business School. He also holds advanced medical qualifications-Post Fellowship Certificate in Nephrology, Master of Medicine (Internal Medicine), Bachelor of Medicine & Bachelor of Surgery. Majid is a qualified Lawyer with a Bachelor of Laws degree from University of Nairobi. Majid is a Member of the Chartered Institute of Arbitrators. Majid currently supervises multiple students at PhD and Master level. He has previously supervised various Master students in both medicine and management disciplines. He has published extensively in both medical and management journals. He is currently a non-executive member of the Board of Trustees at Strathmore University Foundation. He was a founding advisory council member of Executive Health Management Program of Strathmore Business School and served in this council for two terms. Majid's previous work experience in the industry includes being the CEO of AAR Hospital, Hospital, Associate Dean, Clinical Affairs & Chief of Staff at the Aga Khan University Hospital, Executive Director at the Nairobi Women's Hospital, Director of Operations and Utilization management at The Aga Khan University Hospital, Nairobi and the Medical Director at the Aga Khan Hospital, Mombasa. Majid has been involved in management consultancy and strategy development work in numerous organisations across multiple industries. Dr. Majid Twahir currently works as an Associate Dean, Research and Innovation at the Strathmore University Business School and as a Senior Lecturer at its Institute of Healthcare Management.



## Dr. Miriam Njoki Karinja

Dr. Njoki Miriam is a Senior Program Officer for Clinical Research and Trial Program at the Science for Africa Foundation. She is a passionate Clinical Epidemiologist with over 10 years of experience, she has worked across South Africa, Nigeria, and Kenya, collaborating with public-private partnerships to design, implement, and evaluate health interventions in low- and middle-income countries. She has been involved in clinical trials for novel treatments of multidrug-resistant and extensively drug-resistant tuberculosis (MDR-TB/XDR-TB) at TASK Applied Science in Cape Town, South Africa. She also served as a Mission Epidemiologist for Médecins Sans Frontières (MSF-Holland) in Nigeria, providing epidemiological support across multiple states. Before joining SFA Foundation, she worked with the World Food Program in Rome as a Data, Analytics, and Research Consultant. Currently, Dr. Njoki leads the [Clinical Trials Community Africa Network](#) (CTCAN), which fosters collaboration among clinical research stakeholders, pharmaceutical partners, and international counterparts. CTCAN aims to enhance coordination and sustainability in clinical research by aligning networks, increasing visibility of clinical trials capabilities in the continent, streamlining regulatory processes, and promoting knowledge sharing across regions. She holds a PhD in Epidemiology from the Swiss Tropical and Public Health Institute/University of Basel, Switzerland, and a Master's in Clinical Epidemiology from Stellenbosch University, South Africa.



## Prof. David Gathara

Prof. Gathara is an Intermediate Research Fellow at the KEMRI Wellcome Trust Research Programme (KWTRP). He served as an Assistant Professor of Health Systems at the London School of Hygiene and Tropical Medicine, UK, until December 2024. With over 13 years of experience in health systems and services evaluation within the Kenyan health system, Dr. Gathara specializes as an epidemiologist. At KWTRP, he is currently leading research on the nursing workforce, specifically examining the impact of nurse staffing on the quality of care and mortality rates. His previous work includes developing an online implementation toolkit for small and sick newborns and contributing to a health systems complex evaluation across four African countries (Kenya, Tanzania, Malawi, and Nigeria). Additionally, he co-led the Health Services that Deliver for Newborns program, which focuses on understanding the burden, need, and access to newborn care services, and evaluating the quality of these services. He has a background in nursing and holds a Master of Science in Epidemiology from the London School of Hygiene and Tropical Medicine, and a PhD from the University of Amsterdam.



## Emmah Ndirangu

Emmah Ndirangu (MSc. Fin., CPA-K) is a programme finance professional specializing in financial grants management with over 12 years of experience in the non-profit sector. Currently working as the Finance Manager, Grants at the Science for Africa (SFA) Foundation, Emmah oversees a diverse grant portfolio valued at over USD 180 million, and supporting over 100 science grantees across Africa. With expertise spanning the entire grant lifecycle—from budgeting and due diligence to financial reporting and compliance, she is a trusted advisor to program teams, funders, and grantees, combining strategic financial oversight with practical solutions to enhance accountability and impact in grant-funded programs. Emmah is passionate about strengthening grant management practices to drive excellence and sustainability, especially across the African continent. Emmah holds a Master of Science in Finance and Accounting and is a Certified Public Accountant (CPA-K). Science for Africa Foundation (SFA Foundation) is a pan-African, non-profit, public charitable organisation created to support, strengthen, and promote science and innovation in Africa. We serve the African research ecosystem by designing, funding and managing programmes that support excellent science and innovation; and that build and reinforce environments that are conducive for scientists to thrive and produce quality research that impacts development.

## Thematic Discussion

### **Playing By the Rules: Research Grant Compliance for The Uninitiated, Build a Scorecard for Success**

Journey into the jungle of research grant due diligence and grant compliance. Learn why what you don't know really can eat you alive.

#### **Experts**

Prof. Dana Brown  
Dr. Mirriam Njoki

#### **Moderator**

Alice Osiemo

### **Making Research Collaborations Work for You: The Ins and Outs of Authentic Partnerships**

Research partnerships are shifting toward greater equity, with increasing leadership from the Global South. This session explores the key elements of genuine collaboration, offering insights on how to co-design research processes that foster a true exchange of ideas, skills, and funding. Learn how to build partnerships that are both meaningful and mutually beneficial.

#### **Experts**

Prof. Sam Kinyanjui  
Dr. Magid Twahir  
Dr. Cyrus Mugo

#### **Moderator**

Dr. Macharia Chege

### **Nurses: We Do Research**

Meet nurses doing research and hear about their journey. See how and in what different ways you can do it too!

#### **Experts**

Prof. David Gathara  
Dr. Peris Kiarie

#### **Moderator**

Gladys Mutisya

### **Bugs vs. Drugs: Rallying the Hospital Team to Win the War Against Antimicrobial Resistance**

Antimicrobial stewardship is essential for patient safety and the fight against drug-resistant infections. In this session, learn why it's here to stay and how you can implement effective strategies in your own practice. Gain insights from experts who are leading the charge in combating antimicrobial resistance.

#### **Experts**

Prof. Rodney Adam  
David Odada

#### **Moderator**

Dr. Belyse Arakaza

**AT KIJABE HOSPITAL: WE DO RESEARCH!**

## Posters

	Recently published work
1	Family Health Clinical Officers: Key professionals to strengthen primary healthcare in Kenya and beyond. <b>Authors:</b> Katy Linley, Irene Muthoni, Emmanuel Ndeto, Sarah Kamau, Stella Wangui, Pete Halestrap
2	A Teledermatology Survey in Kenya. <b>Authors:</b> Mary B. Adam, Hashim Kaderbhai, Jennifer L. Adams, Rodney D. Adam, Jennifer Fernandez
	Completed research projects
3	Exploring Caregiver Experiences in Providing Continence Care for Older Adults at AIC Kijabe Hospital's Ambulatory Care: A Qualitative Study. <b>Authors:</b> Stella Kibet, Faith Lelei, Jonathan Nthusi
4	Clinician Perspectives on the Use of Templates to Enhance Documentation Treatment Notes for Infectious Disease Patients: A Qualitative Study. <b>Authors:</b> Peter Watson, Agwings Chagwira, George Rotich, Naomi Makobu
5	Factors Influencing Adherence to HIV Post-Exposure Prophylaxis Among Healthcare Workers at AIC Kijabe Hospital. <b>Authors:</b> Boaz Odhiambo Omenda, Pete Halestrap, Patrick Asaava
6	Long-term Survival and Quality of Life Using Self-administered Modified Oral-to-Gastric Tube Feeding: A Case Study from Rural Kenya. <b>Authors:</b> Hellen Kihoro, Argwings Chagwira, Merecia Nguka
7	Assessment of the Causes and Outcomes of Hospitalization in Children with Sickle Cell Disease at Jaramogi Oginga Odinga Teaching and Referral Hospital. <b>Authors:</b> O'Neil Wamukota Kosasia, Ricky Felix Kwayi, Cynthia Moraa Morema, Jackline Wanjiku Githinji
8	Colon Adenocarcinoma Invading the Duodenum, Pancreas, and Superior Mesenteric Vein: A Case Series and Review of the Literature. <b>Authors:</b> Faith Cheshari, Ivan Marando, Leahcaren N. Oundoh, Dieudonné Afidu Lemfuka, Richard Davis, Joseph Nderitu
9	Diagnoses and Outcomes of Pediatric Admissions from AIC Kijabe Hospital Casualty. <b>Authors:</b> Arianna Shirk, Caleb Karanja, Emily Hartford, Amelie von-Saint André von Armin
10	A Retrospective Analysis of the Outcomes of Cholecystectomies Done at AIC Kijabe Hospital. <b>Authors:</b> Vallery Logedi, Jack Barasa
11	Laparoscopic Assisted Hemicolectomy at AIC Kijabe Hospital. <b>Authors:</b> Leahcaren N. Oundoh, Katlyn G. McKay, Afidu Lemfuka, Lydia Kersh, Maya V. Roytman, Caleb Van Essen, Joseph Nderitu, Richard Davis

## Posters

12	Treatment Outcomes of Wilm's Tumor: A Faith Based Institution's Experience. <b>Authors:</b> Michelle Obat, Ken Muma, Sarah Muma, Mehret Enaro, Muse Frenah
13	One-Year Mortality Outcome for Heart Failure Patients in a Faith-Based Hospital in Kenya. <b>Authors:</b> Kimani Brian, Mwangi C, Mwende M, Gachau F, Wakuthii Carol, Otieno George.
14	Paediatric Ambulatory Surgery in a Rural Hospital: A Contextualized Approach. <b>Authors:</b> Bethleen Waisiko , David Limo, Muma Nyagetuba
15	Assessment of Phlebotomy Practice and Turnaround Time in Blood Sample Collection: A Descriptive Study. <b>Authors:</b> Argwings Chagwira, Laura Timina, Shadrack Yego, George Rotich, Peter Watson
16	Predicting Mortality in Hypoxemic Adults in Sub-Saharan Africa: Investigating the Prognostic Performance and Utility of Three Severity of Illness Scores. <b>Authors:</b> Nelly Kebeney, Tiara Calhoun, George Otieno, Elisabeth Riviello
17	Prevalence of Musculoskeletal Pain Among Surgeons in Sub-Saharan Africa. <b>Authors:</b> Vallery Logedi, Richard Davis, Adrian Park
18	Understanding Adolescent Transitions for Youth with Spina Bifida in A LMIC: Using Focused Group Discussions to Evaluate Successes and Challenge Areas Identified By Young Adults Living With Spina Bifida. <b>Authors:</b> Mercy Mwangi, Luke McAuley, Mary B. Adam
	<b>Quality Improvement Projects</b>
19	How Relationships Make Quality Improvement Projects Work and Sustainable. <b>Authors:</b> Wambui Makobu, Angie Doneslon, Tod Newman, Mary Adam
20	Mind the Gap: Hand Hygiene Compliance Rates Among Healthcare Workers: An Observational Study and Improvement Opportunity. <b>Authors:</b> Argwings Chagwira, Grace Njoroge, Peter Watson, Philip Musiya
21	AIC Kijabe Hospital Community Health Program: Troubleshooting Implementation of eCHIS Kenya. <b>Authors:</b> Ogwenno Brian, Simon Mbugua, Wambui Makobu, Wilson K. Kamiru, Brenda Chepkemioi
22	Assessing the Effectiveness of Mobile Obstetrics Simulation Training in a Low Resource Setting: A Pre-Test and Post-Test Study. <b>Authors:</b> Phyllis Ngure, Faith Mungai, Immanuel Mugambi, Mary Mungai
23	Complete Hospital Supply Chain Automation: Case of AIC Kijabe Hospital. <b>Authors:</b> Timothy Makori; Patrick Wairire; Isaac Kenge; Oliver Mulwa; Collins Muigai

## Posters

24	<p>Evaluating the Efficacy of a Revised Uterotonic Protocol on Maternal Outcomes During Cesarean Delivery at AIC Kijabe Hospital, Kenya: A PICO-Based Quality Improvement (QI) Study.</p> <p><b>Authors:</b> Christelle Gbiatene Kasoki, Matthew Kynes</p>
25	<p>Faith + Medicine Summit</p> <p><b>Authors:</b> Faith Lelei, Geoffrey Ndivo., Joshua Owino, Matt Kynes, Ansley Kynes, Muthoni Magayu, Mfanelo Sobekwa, Mary B. Adam</p>
26	<p>Multimodal Interventions to Improve Hand Hygiene Adherence Among Healthcare Workers in a Resource Limited Tertiary Teaching Hospital: A Quality Improvement Project.</p> <p><b>Authors:</b> Watson Maina, Tabby M, Chagwira A, Belyse Arakaza, Terry M, G. Rotich, Dr. Lepore, G. Kuria, J Mark, Brenda K, Faith K, Jemutai S.</p>
27	<p>Improving Compliance of Grant Funding Requirements at AIC Kijabe Hospital.</p> <p><b>Authors:</b> Alice Osiemo, Mary Adam, Angela Donelson</p>
28	<p>Improving diabetes care with a patient-held handbook.</p> <p><b>Authors:</b> Katy Linley, Felix Magego, Beth Wanjiku, Irene Muthoni, Alice Wangu, Sarah Kamau, Stella Wangui, Stella K. Musundi, Nancy Njoroge</p>
29	<p>Improving the Quality of Documentation for Diabetes Patients at a Chronic Care Center in a Faith-Based Tertiary Hospital in Kenya.</p> <p><b>Authors:</b> Elijah Ntomariu, Kelvin Gathima, Stella Mbugua, Albright M, Maria O, Tabitha M, Zablon W, Irene M, Bartholomew M, Belinda Jekpogei, Belyse Arakaza</p>
30	<p>Increase Uptake of Cervical Cancer Screening in Kijabe.</p> <p><b>Authors:</b> Kaya Belknap, Antony Kuria, Paul Ocharo, Beatrice Odera, Sarah Kamau, Stella Njenga, Carolyne Muthoni, Zipporah Migwe, Mary Kamau, Mary Wanjiru, Rama Muli</p>
31	<p>Moving Diabetes Patients to Diabetes Clinic.</p> <p><b>Authors:</b> Stella Wangui, Anastacia Lau, Joram Jomo, Stella Khavugwi, Mercy Wambui, Stella Kibet</p>
32	<p>Evaluating the effectiveness of the pre- and post-test model of learning in TB training.</p> <p><b>Authors:</b> Emmanuel Ndeto, Elijah Mungathia, Harriet Wanjiru—CPD TEAM</p>
33	<p>Integrating Continuous Quality Improvement into Primary Health Care.</p> <p><b>Author:</b> Emmanuel Ndeto</p>
34	<p>Improving Effective Prenatal Care at the Maternal and Child Health Clinic of AIC Kijabe Hospital.</p> <p><b>Authors:</b> Morgan De Kleine, Sharanna Johnson, Kaya Belknap</p>
35	<p>Laravel &amp; DevOps: Revolutionizing Clinical Applications at Kijabe Hospital.</p> <p><b>Authors:</b> Timothy Makori, Kevin Mwaura, Oliver Mulwa, Simon Ngaruiya, Collins Muigai, Francis Gachau, Godwin Wechuli, Amos Cheruiyot, Augustine Okoth</p>

## Posters

36	<p>Telemedicine Attempts through Inhouse Development: Feats &amp; Challenges.</p> <p><b>Authors:</b> Timothy Makori, Oliver Mulwa, Simon Ngaruiya, Collins Muigai, Kevin Gaitho, Francis Gachau, Emmanuel Njoroge</p>
37	<p>Multimodal Approach to Reducing Blood Culture Contamination at Kijabe Hospital.</p> <p><b>Authors:</b> Argwings Chagwira, Dorcas. J .Sumukwo, Brenda Kinya</p>
38	<p>Barriers and Facilitators to Hand Hygiene Compliance Among Healthcare Workers in Kijabe Hospital: A Qualitative Study.</p> <p><b>Authors:</b> Terry M, Chagwira. A, Wambui M &amp; Tabby M, Belyse A, G.Rotich, Lepore, Faith.K, Brenda.K, Dorcas .J, Grace. N</p>
	<p><b>Medical education and training programs</b></p>
39	<p>Integrating Virtual Reality Simulation for Point-of-Care Ultrasound (POCUS) Training in Sub-Saharan Africa.</p> <p><b>Authors:</b> Kimani Brian, Arango Susana, Buyck David, Ngure Phyllis, Mugambi Immanuel, Thairu Benjamin, Mwende Mercy, Otieno George</p>
40	<p>NCD course development.</p> <p><b>Authors:</b> Kaya Belknap, Katy Linley, Harriet Wanjiru, Irene Muthoni, Emmanuel Ndeto, Elijah Mungathia</p>
41	<p>What is the Perceived Acceptability, Accuracy and Appropriateness of Online Artificial Intelligence Derived Medical Educational Cases?</p> <p><b>Authors:</b> Artificial Intelligence, Arianna Shirk, Elijah Ntomariu, Amos Cheruiyot , Dan Claud, Peter Halestrap</p>
	<p><b>Work in progress (both quality improvement and research focused)</b></p>
42	<p>Building Respiratory Support in East Africa Through High Flow versus Standard Flow Oxygen Evaluation (BREATHE).</p> <p><b>Authors:</b> George O. Otieno, Nelly C. Kebeney, Valentine Rambula, Joseph G. Wainaina; James M. Mwinzi; Truphosa O. Awuor, Nelius Wairimu, Francis K. Irangi, Elisabeth Riviello</p>
43	<p>Cerebral Palsy Knowledge by Caregivers with Children with Cerebral Palsy.</p> <p><b>Authors:</b> Denis K Koech, Luke McAuley, Jessica Tsotsoros, Jessica Koste</p>
44	<p>Communication Challenges Experienced by Caregivers of Children with Autism Spectrum Disorder (ASD) Who are Non-Verbal.</p> <p><b>Authors:</b> Shalline Otuma, Luke McAuley, Jessica Tsotsoros, Jessica Koster</p>
45	<p>Comparison of Newly Designed Wheelchairs Locally Available in Kenya.</p> <p><b>Authors:</b> Luke McAuley, Alpine Kipsang, Ann Chesoli, Edmon Kipruto, Faith Ndungu, Robert Mutuko, POT, Cynthia Chelangat, Denis Koech, Lazarus Maraka, Mary Njoroge, Maximillah Ikaa, Shalline Otuma, Jessica Tsotsoros</p>
46	<p>Competency Competency in Recognition of Cardiac Arrhythmia in Kenya (CIRCAK).</p> <p><b>Authors:</b> Kimani Brian, Gitura Hannah, Thairu Benjamin, Mwende Mercy, Otieno George, Keller Michael, Lee Burton</p>

## Posters

47	<p>Evaluating the Process while Testing the Intervention: A Process Evaluation Protocol for the BREATHE Oxygen Therapy Randomized Controlled Trial in Kenya, Malawi, and Rwanda.</p> <p><b>Authors:</b> Tiara Calhoun, Lauren A. Onofrey, Felix Limbani, Valentine E. Rambula, Mary B. Adam, Ndazonia Peter Kwanjo Banda, Gahungu Blaise, Gashame Dona Fabiola, MD, Stephen Gordon, Nancy Haff, Esther Kageche, , Nelly Kebeney, Julie Lauffenburger, Peter Oduor, George Otieno, Innocent Sulani, Theogene Twagirimugabe, Uwamahoro Doris Lorette, Elisabeth Riviello, Jeanine Condo.</p>
48	<p>Impact of Hydrotherapy on Cerebral Palsy Management.</p> <p><b>Authors:</b> Mary Njoroge, OT, POTs, Luke McAuley, MOTR/L, Jessica Tsotsoros, PhD, OTR/L, Jessica Koster, MOTR/L</p>
49	<p>Implementation of Evidence-Based Practice by Occupational Therapists In Kenya.</p> <p><b>Authors:</b> Maximillah Ikaa, OT, POTs, Luke McAuley, MOTR/L, Jessica Tsotsoros, PhD, OTR/L</p>
50	<p>Patterns of pediatrics heart diseases diagnosed by echocardiography in a rural hospital in Kenya.</p> <p><b>Authors:</b> Kimani Brian, Mwende Mercy , Musau Jack, Lokocheria Frank, Otieno George, Arianna Shirk, Jowi Christine</p>
51	<p>Psychological Distress and Coping Strategies Among Caregivers of Children with Autism Spectrum Disorders (ASD).</p> <p><b>Authors:</b> Cynthia Chelangat, OT, POTs, Luke McAuley, MOTR/L, Jessica Tsotsoros, PhD, OTR/L, Jessica Koster, MOTR/L</p>
52	<p>Breaking the Chain: Integrated Active Surveillance and Intervention for Nosocomial Infection Reduction.</p> <p><b>Authors:</b> Peter Watson, Agwings Chagwira, George Rotich, Belyse Arakaza, Grace kuria, Tabitha Muchendu, Christine Murugu, Mary Adam</p>
53	<p>Safety of Administration of Vasopressors Through Peripheral and Central Venous Catheters in a Resource-Limited Rural Kenyan Hospital.</p> <p><b>Authors:</b> Brian Kimani, Grace Gao, Linette Lepore, Winslet Okari, Zahra Aghababa, Moses Odhiambo, Alice Mwonge, Jack Musau, Benjamin Thairu, Judy Maneeno, Hannah Wanjiru 1, Fredrick Ndibaru, Lilian Vihenda, Dorothy Ogoda, Judy Wairimu, Ann Nalungala, Michael Kinuthia, Kinzi Nixon, B Jason Brotherton, Kristina Rudd</p>
54	<p>Safety of Administration of Vasopressors Through Peripheral and Central Venous Catheters in a Resource-Limited Rural Kenyan Hospital.</p> <p><b>Authors:</b> Linette Lepore, Brian Kimani, Grace Gao, Winslet Okari, Zahra Aghababa, Alice Mwonge, Jack Musau, Benjamin Thairu, Judy Maneeno, Hannah Wanjiru, Fredrick Ndibaru, Lilian Vihenda, Ann Nalungala, Michael Kinuthia, Kinzi Nixon, B Jason Brotherton, Kristina Rudd</p>
55	<p>Impact of Occupational Therapy Interventions On Social Participation And Behavioral Outcomes On Children With Autism Spectrum Disorder In Kenya</p> <p><b>Authors:</b> Lazarus W. Maraka, OT, POTs, Luke McAuley, MOTR/L, Jessica Koster, MOTR/L, Jessica Tsotsoros, PhD, OTR/L</p>
56	<p>Prospective Study on Subtotal Parathyroidectomy Outcome in Patients with Secondary Hyperparathyroidism at AIC Kijabe Hospital</p> <p><b>Authors:</b> Davis Kenari, Richard Davis, Kristin Long</p>
57	<p>Progress Report: Hand Hygiene QI</p>

# Bibliography

## Published work from January 2024 to March 2025

1	Anito, M. F., Desalegn, M., Novotny, N. M., & Hansen, E. N. (2024). <b>Moral injury in healthcare: A low-and-middle-income perspective</b> . World Journal of Surgery, 48(10), 2322–2326. <a href="https://doi.org/10.1002/wjs.12148">https://doi.org/10.1002/wjs.12148</a>
2	Berndsen, R. E., Montgomery, M. E., Belknap, K., & Berry-Cabán, C. S. (2024). <b>Swyer-James-MacLeod Syndrome in an East African Patient</b> . Cureus, 16(9), e69874. <a href="https://doi.org/10.7759/cureus.69874">https://doi.org/10.7759/cureus.69874</a>
3	Halestrap, P., Aliba, D., Otieno, G., Brotherton, B. J., Gitura, H. W., Matson, J. E., Lee, B. W., & Mbugua, E. (2023). <b>Development and delivery of a higher diploma in emergency medicine and critical care for clinical officers in Kenya</b> . African Journal of Emergency Medicine: Revue Africaine de La Medecine d'urgence, 13(4), 225–229. <a href="https://doi.org/10.1016/j.afjem.2023.08.006">https://doi.org/10.1016/j.afjem.2023.08.006</a>
4	Hinson, C., Alkhatib, J., Williams, L., Zope, M., Ameh, E. A., & Nthumba, P. (n.d.). <b>Navigating the challenges of surgical research in low-and-middle income settings</b> . The American Journal of Surgery. <a href="https://doi.org/10.1016/j.amjsurg.2025.116230">https://doi.org/10.1016/j.amjsurg.2025.116230</a>
5	Hinson, C., Kilpatrick, C., Rasa, K., Ren, J., Nthumba, P., Sawyer, R., & Ameh, E. (2024). <b>Global surgery is stronger when infection prevention and control is incorporated: A commentary and review of the surgical infection landscape</b> . BMC Surgery, 24(1), 397. <a href="https://doi.org/10.1186/s12893-024-02695-7">https://doi.org/10.1186/s12893-024-02695-7</a>
6	Javid, P. J., Joharifard, S., Nyagetuba, M. J. K., & Hansen, E. N. (2024). <b>A time out for prayer</b> . World Journal of Surgery, wjs.12149. <a href="https://doi.org/10.1002/wjs.12149">https://doi.org/10.1002/wjs.12149</a>
7	Kauffmann, R. M., & Walters, C. (2023). <b>Bidirectional Medical Training: Legislative Advocacy and a Step Towards Equity in Global Health Education</b> . Annals of Surgery, 278(6), e1154–e1155. <a href="https://doi.org/10.1097/SLA.0000000000005964">https://doi.org/10.1097/SLA.0000000000005964</a>
8	Kehinde, T., Biwott, J., Sund, G., & Kynes, J. M. (2024). <b>Machines matter too: Including biomedical engineering partnerships in global health initiatives</b> . The Lancet. Global Health, 12(11), e1905–e1909. <a href="https://doi.org/10.1016/S2214-109X(24)00294-8">https://doi.org/10.1016/S2214-109X(24)00294-8</a>
9	Kortz, T. B., Holloway, A., Agulnik, A., He, D., Rivera, S. G., Abbas, Q., Appiah, J. A., Arias, A. V., Attebery, J., Camacho-Cruz, J., Caporal, P., de Sa Rodrigues, K. E., Fink, E., Kissoon, N., Lee, J. H., López-Barón, E., Murthy, S., Muttalib, F., Nielsen, K., ... Zamarbide, M. P. (2025). <b>Prevalence, aetiology, and hospital outcomes of paediatric acute critical illness in resource-constrained settings (Global PARITY): A multicentre, international, point prevalence and prospective cohort study</b> . The Lancet Global Health, 13(2), e212–e221. <a href="https://doi.org/10.1016/S2214-109X(24)00450-9">https://doi.org/10.1016/S2214-109X(24)00450-9</a>
10	Linley, K. (2024). <b>Family Health Clinical Officers: Key professionals to strengthen primary healthcare in Kenya</b> . African Journal of Primary Health Care & Family Medicine, 16(1). <a href="https://doi.org/10.4102/phcfm.v16i1.4594">https://doi.org/10.4102/phcfm.v16i1.4594</a>
11	Malapati, S. H., Edelen, M. O., Nthumba, P. M., Ranganathan, K., & Pusic, A. L. (2024). <b>Barriers to the Use of Patient-Reported Outcome Measures in Low- and Middle-income Countries</b> . Plastic and Reconstructive Surgery. Global Open, 12(2), e5576. <a href="https://doi.org/10.1097/GOX.00000000000005576">https://doi.org/10.1097/GOX.00000000000005576</a>
12	Miima, M., & Marsuk, E. (2023). <b>Systemic emergency department performance in a low resource tertiary health facility in central Kenya: Micro level emergency care system evaluation</b> . African Journal of Emergency Medicine: Revue Africaine de La Medecine d'urgence, 13(3), 121–126. <a href="https://doi.org/10.1016/j.afjem.2023.05.008">https://doi.org/10.1016/j.afjem.2023.05.008</a>

13	Mohamed, S. S., Temu, R., Komba, L. F., Kaino, M. M., Olotu, F. I., Ndebea, A. S., & Vaughan, B. N. (2024). <b>Patient Satisfaction With, and Outcomes of, Ultrasound-Guided Regional Anesthesia at a Referral Hospital in Tanzania: A Cross-Sectional Study.</b> <i>Anesthesia and Analgesia</i> , 138(1), 180–186. <a href="https://doi.org/10.1213/ANE.0000000000006374">https://doi.org/10.1213/ANE.0000000000006374</a>
14	Mutua, D., Omotola, A., Bonilla, M., Bhakta, N., Friedrich, P., Wata, D., Muma, S. N., Ganey, M., Muriithi, C., Mwangi, M., Maina, A. K., & Libes, J. (2023). <b>Implementation of a formalized evaluation and planning tool to improve pediatric oncology outcomes in Kenya.</b> <i>Pediatric Blood &amp; Cancer</i> , 70(12), e30657. <a href="https://doi.org/10.1002/pbc.30657">https://doi.org/10.1002/pbc.30657</a>
15	Nally, C., Temmerman, M., Van De Voorde, P., Koroma, A., & Adam, M. (2024). <b>Using Continuous Quality Improvement in Community-based Programming During Disasters: Lessons Learned from the 2015 Ebola Crisis in Sierra Leone.</b> <i>Disaster Medicine and Public Health Preparedness</i> , 18, e316. <a href="https://doi.org/10.1017/dmp.2024.270">https://doi.org/10.1017/dmp.2024.270</a>
16	Nthumba, P. M. (2024). <b>Global Surgery: The Challenges and Strategies to Win a War That Must Be Won.</b> <i>Plastic and Reconstructive Surgery. Global Open</i> , 12(7), e5953. <a href="https://doi.org/10.1097/GOX.00000000000005953">https://doi.org/10.1097/GOX.00000000000005953</a> .
17	Nthumba, P. M., Mwangi, C., & Odhiambo, M. (2024). <b>Patient safety in a rural sub-Saharan Africa hospital: A 7-year experience at the AIC Kijabe Hospital, Kenya.</b> <i>PLOS Global Public Health</i> , 4(11), e0003919. <a href="https://doi.org/10.1371/journal.pgph.0003919">https://doi.org/10.1371/journal.pgph.0003919</a>
18	Nthumba, P. M., Odhiambo, M., Pusic, A., Kamau, S., Rohde, C., Onyango, O., Gosman, A., Vyas, R., & Nthumba, M. N. (2024). <b>The State of Surgical Research in Sub-Saharan Africa: An Urgent Call for Surgical Research Trainers.</b> <i>Plastic and Reconstructive Surgery – Global Open</i> , 12(6).
19	Nthumba, P. M., Barasa, I. K., Malapati, . S. H., Odhiambo, M. O., & Nthumba, N. M. (2024). <b>Cesarean birth decision-to-delivery interval in sub-Saharan Africa: A systematic review and meta-analysis.</b> <i>Journal of Obstetrics and Gynaecology of Eastern and Central Africa</i> , 36(2). <a href="https://doi.org/10.59692/jogeca.v36i2.418">https://doi.org/10.59692/jogeca.v36i2.418</a>
20	Nthumba, P. M., & Oundoh, L. N. (2024). <b>Glomus Tumors: A Systematic Review of the Sub-Saharan Africa Experience.</b> <i>Plastic and Reconstructive Surgery - Global Open</i> , 12(2), e5564. <a href="https://doi.org/10.1097/GOX.00000000000005564">https://doi.org/10.1097/GOX.00000000000005564</a>
21	Prasad, K., Peterson, N., Nolen, D., Macharia, C., Mannion, K., Rohde, S., & Sinard, R. (2024). <b>Building a sustainable free flap program in a resource-limited setting: A 12-year humanitarian effort.</b> <i>Head &amp; Neck</i> , 46(5), 1051–1055. <a href="https://doi.org/10.1002/hed.27640">https://doi.org/10.1002/hed.27640</a>
22	Tsotsoros, J., Chamberlin, H., Collins, R., McDonald, K., & McAuley, L. (2024). <b>The maintenance and interface of two wheelchairs used by children with cerebral palsy in Kenya: A cross-sectional study.</b> <i>Disability and Rehabilitation. Assistive Technology</i> , 1–7. <a href="https://doi.org/10.1080/17483107.2024.2374047">https://doi.org/10.1080/17483107.2024.2374047</a> .
23	Umutesi, G., McEvoy, M. D., Starnes, J. R., Sileshi, B., Atieli, H. E., Onyango, K., & Newton, M. W. (2019). <b>Safe Anesthesia Care in Western Kenya: A Preliminary Assessment of the Impact of Nurse Anesthetists at Multiple Levels of Government Hospitals.</b> <i>Anesthesia and Analgesia</i> , 129(5), 1387–1393. <a href="https://doi.org/10.1213/ANE.00000000000004266">https://doi.org/10.1213/ANE.00000000000004266</a>

24	Umutesi, G., Mizero, J., Riviello, R., Nshimyiryo, A., Nshunguyabahizi, M., Kamau, J., Munyuzangabo, M., Cubaka, V., Mpanumusingo, E., Gatete, J. D. D., Shyirambere, C., Newton, M. W., Mubiligi, J. M., Kateera, F., & Sileshi, B. (2025). <b>Perioperative outcomes at three rural Rwandan district hospitals: A 28-day prospective observational cohort study.</b> <i>BMJ Global Health</i> , 10(3), e017354. <a href="https://doi.org/10.1136/bmjgh-2024-017354">https://doi.org/10.1136/bmjgh-2024-017354</a>
25	Waweru, P. K., Yulu, E., Matuja, S. S., & Gatimu, S. M. (2024). <b>UPESI: Swahili translation of the FAST acronym for stroke awareness campaigns in East Africa.</b> <i>African Journal of Emergency Medicine : Revue Africaine de La Medecine d'urgence</i> , 14(3), 141–144. <a href="https://doi.org/10.1016/j.afjem.2024.05.003">https://doi.org/10.1016/j.afjem.2024.05.003</a>
26	Wedderburn, C. J., Musiime, G. M., & McHenry, M. S. (2024). <b>Care of the Child Perinatally Exposed to Human Immunodeficiency Virus.</b> <i>Clinics in Perinatology</i> , 51(4), 881–894. <a href="https://doi.org/10.1016/j.clp.2024.08.011">https://doi.org/10.1016/j.clp.2024.08.011</a>
27	Xiao, C., Gebremariam, N. E., & Nthumba, P. (2024). <b>The Use of the Pedicled Nonislanded Foot Fillet Flap to Avoid an Above-the-Knee Amputation after Trauma.</b> <i>Plastic and Reconstructive Surgery. Global Open</i> , 12(8), e6070. <a href="https://doi.org/10.1097/GOX.00000000000006070">https://doi.org/10.1097/GOX.00000000000006070</a>